CHAPTER 1

UH-1 PILOT

	PARAGRAPH	PAGE
MARINE LIGHT ATTACK SQUADRON UNIT TEMPLATE, MISSION STATEMENT, CORE COMPETENCY SKILLS	100	1-3
PROGRAMS OF INSTRUCTION (POI) FOR BASIC/TRANSITION PILOT	101	1-10
POI FOR CONVERSION PILOT	102	1-10
POI FOR REFRESHER PILOT	103	1-10
POI FOR MODIFIED REFRESHER PILOT	104	1-10
POI FOR FRS INSTRUCTOR PILOT	105	1-10
GROUND/ACADEMIC TRAINING	110	1-10
FLIGHT/SIMULATOR/EVENT TRAINING FOR BASIC/TRANSITION PILOT	120	1-11
FLIGHT/SIMULATOR/EVENT TRAINING FOR CONVERSION PILOT	121	1-12
FLIGHT/SIMULATOR/EVENT TRAINING FOR REFRESHER PILOT	122	1-13
FLIGHT/SIMULATOR/EVENT TRAINING FOR MODIFIED REFRESHER PILOT	123	1-14
FLIGHT/SIMULATOR/EVENT TRAINING FOR INSTRUCTOR TRAINING	124	1-14
GRADUATE LEVEL COURSES	125	1-14
GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS	130	1-14
COMBAT CAPABLE PHASE	131	1-17
COMBAT READY PHASE	132	1-38
COMBAT QUALIFICATION PHASE	133	1-51
FULL COMBAT QUALIFICATION PHASE	134	1-61
INSTRUCTOR UNDER TRAINING (IUT) FLIGHT/SIMULATOR/EVENT PERFORMANCE REQUIREMENTS	140	1-71
REQUIREMENTS, QUALIFICATIONS AND DESIGNATIONS	150	1-77
ORDNANCE REQUIREMENTS	160	1-90

FIGURES

PAGE

1-1 UH-1N PILOT NOTIONAL TRAINING PROGRESSION MODEL 1-9

1-2 MOS 7563 REFLY INTERVAL, COMBAT READINESS PERCENTAGE 1-91

1-3 MOS 7563 FLIGHT UPDATE CHAINING 1-97

CHAPTER 1

UH-1N PILOT

100. MARINE LIGHT ATTACK SQUADRON UNIT TEMPLATE, MISSION STATEMENT, CORE COMPETENCY SKILLS

NOTE

The capabilities defined and described in the core capability and unit template sections are provided to ensure each like squadron maintains a common base of training and depth of capabilities. When resources permit, and when in the judgment of the commander additional training would significantly increase the unit's warfighting capability, training to a level above these base capabilities is permitted. It is incumbent upon and expected of the commander to balance any increase in the depth of core capabilities against the long-term health and readiness of the unit while staying within resource constraints.

1. HMLA Mission. Provide offensive air support, utility support, armed escort and airborne supporting arms coordination during expeditionary, joint, or combined operations.

2. Mission Essential Task List (METL)

a. Provide airborne command, control and coordination for assault support operations.

b. Provide control, coordination, target acquisition and terminal guidance for supporting arms.

c. Conduct assault support transport of combat troops, supplies and equipment.

d. Conduct armed and visual reconnaissance.

e. Provide armed escort.

f. Provide an airborne command and control platform for command elements.

g. Conduct assault support for evacuation operations and maritime special operations.

h. Provide fire support and security for forward and rear area forces.

i. Conduct Tactical Recovery of Aircraft and Personnel (TRAP) operations.

j. Augment local Search and Rescue (SAR) assets, and provide support for casualty evacuation operations.

k. Maintain the capability to operate from amphibious shipping, other floating bases, and Forward Operating Bases (FOBs).

l. Maintain the capability to operate at night, in adverse weather, and under instrument flight conditions at extended ranges.

m. Maintain self-defense capability from ground-to-air and air-to-air threats.

n. Perform organizational maintenance on assigned aircraft in all environmental conditions.

3. Table Of Organization

UH-1 & AH-1

Full Squadron = 27 Aircraft: 18 AH-1W, 9 UH-1N.
T/O = 72 Officers: 44 AH-1W, 23 UH-1N, 4 Maintenance Officers, 1 Flight Surgeon, 4 Corpsmen, 19 Crew Chiefs, 17 Aerial Gunners/Observers and 4 Functional Check Aircrew for a total of 399 Marine and Navy Enlisted.
Detachment = 6 AH-1W & 3 UH-1N: T/O = 21 Officers, 95 Enlisted.
Mother Squadron = Full Squadron Minus One Detachment.

4. Squadron Core Capability

a. A core capable squadron is able to sustain the following minimum performance on a daily basis during sustained contingency/combat operations, assuming at least 100% PAA, 90% in reporting status and 90% T/O on hand in all MOSs. If < 90%, core capability will be degraded by a like percentage. The extent to which a core capable squadron is able to surge beyond its core capability is situational dependent.

b. A core capable squadron is able to sortie one, four plane division of which one section is HLL mission capable and one section is LLL. Perform the above from a main base, appropriate sized expeditionary base, and/or from amphibious platforms. All of the above sorties are able to be flown in any mix of sections necessary while performing small team insert/extract, command and control, FAC(A), and armed tactics.

c. A core capable detachment is able to conduct small team insert/extract, command and control, FAC(A), and armed tactics. Sortie one mission capable aircraft in LLL conditions twice during a 24-hour period. Perform the above from a main base, appropriate sized expeditionary base, and/or from amphibious platforms.

5. Qualifications And Designations

a. Qualification. A qualification is a status assigned to personnel based on demonstration of proficiency in a specific skill. Specific criteria to achieve qualifications shall be delineated in individual T&R chapters. Upon successful completion of qualification criteria, commanding officers may issue an appropriate qualification letter for inclusion in the NATOPS jacket and APR/MPR. Aircrew do not lose a qualification as a function of refly factor for individual events. Loss of proficiency (delinquent refly factor) for all associated qualification core skill events constitutes loss of that qualification. Re-qualification requires demonstration of proficiency. Re-qualification criteria shall be delineated in individual T&R chapters.

b. Designation. A designation is a status assigned to an individual based on leadership ability. A designation is a command specific, one-time occurrence and remains in effect until removed for cause. Specific designation requirements shall be delineated in individual T&R chapters. Commanders shall issue a designation letter to the individual upon the

occasion of original designation, with appropriate copies for inclusion in the NATOPS jacket and APR/MPR.

c. Qualifications and Designations Matrix. These tables serve to delineate the events required for initial and re-qualification of all qualifications and designations. All phase lectures, briefs, squadron training and prerequisites must be complete prior to completing final events. Qualification and designation letters signed by the commanding officer should be placed in NATOPS and APR jackets. Loss of proficiency for all associated core skill events (200-300 level) causes the associated qualification to be lost. Regaining the qualification requires a demonstration of proficiency through the "R" coded syllabus. The commanding officer may tailor a syllabus based on the experience of the individual pilot.

Qualification	**Initial Event Qualification Requirements**. All qualifications require a letter signed by the commanding officer to be placed in the NATOPS and APR. **Re-qualification**. A pilot shall fly all associated qualification "R" coded events. Modification to this standard is at the discretion of the commanding officer.
INST (RQRD-600)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
NATOPS (RQRD-601)	IAW OPNAV 3710.7 and an annual qualification letter signed by the commanding officer.
FAM (RQRD-602)	Semi-annual EP simulator.
TERF (QUAL-610)	210, 211
NSQ HLL (QUAL-611)	211, 221, 223
NSQ LLL (QUAL-612)	310, 311, 312, 313
CQ (QUAL-615)	200, 201, 202, 330
NVDCQ (QUAL-616)	331
Night CQ (QUAL-617)	430
RWDACM (QUAL-618)	411, 412, 413
DACM (QUAL-619)	414, 415, 416
FAC(A) (QUAL-623)	340, 341, 342, 343
TAC(A) (QUAL-625)	470

Designation	**Designation Requirements**. All designations require a letter signed by the commanding officer to be placed in the pilot's NATOPS jacket and APR.
PQM (DESG-630)	Successful completion of NATOPS and instrument checks.
UHC (DESG-631)	Successful completion of the Combat Ready phase and 323, 324, 325 of the Combat Qualified phase.
FCP (DESG-632)	Upon completion of the DESG-632 evaluation flight, the commanding officer may designate the PUI a Functional Check Pilot.
SECTION LEAD (DESG-649)	640, 641, 649 (eval). PUI will fly any of the previously flown Combat Ready or Combat Qualification sorties in conjunction with the 649 tracking code.
DIVISION LEAD (DESG-659)	650, 651, 659 (eval). The PUI will fly any of the previously flown Combat Ready or Combat Qualification sorties in conjunction with the 659 tracking code.
FLIGHT LEAD (DESG-669)	The PUI will fly any of the previously flown sorties in conjunction with the 669 tracking code.
AMC (DESG-679)	659. Upon completion of the DESG-679 evaluation flight, the commanding officer may designate the PUI an Air Mission Commander.
BIP (IDSG-680)	500, 501, 502, 503, 504, 505
TERFI (IDSG-681)	510, 511
WTO (IDSG-682)	520, 521
FAC(A)I (IDSG-683)	IAW the MAWTS-1 Course Catalog.
DACMI (IDSG-688)	
TAC(A)I (IDSG-689)	
NSFI (IDSG-694)	
NSSI (IDSG-695)	
NSI (IDSG-696)	
WTI (IDSG-699)	

d. Basic Aircrew Qualifications. To be considered Core Competent, a squadron must possess the following numbers of aircrew who are at least 75% complete in the core skill and proficient in the core skills listed below (through Combat Qualification phase). Proficiency is defined in paragraph (i) below. (Note: If a squadron is < T/O, required numbers are reduced by a like %)

UH-1N CORE SKILL	SQDN TOTAL 23 PILOTS	SQDN TOTAL 19 C/C & 17 A/O
TERF	10	5/5
NVD	10	5/5
CAL	10	5/5
SWD	10	5/5
CQ	10	5/5
EW	6	3/3
ESC	10	5/5
ANSQ	6	3/3
TAC	6	3/3
FAC	4	2/2

e. 200 And 300 Level Sorties Quick Reference. To be considered proficient in a core skill, aircrew must complete at least 75% of the 200-300 level sorties for that core skill and maintain proficiency in at least the number of respective core skill sorties listed in paragraph (f) below.

UH-1	TERF	NVD	CAL	SWD	ESC	ANSQ	CQ	FAC	TAC	TOTAL
Initial	2	2	4	5	3	4	5	4	8	37
Refresher	0	0	3	3	2	3	5	4	4	24
T&R CODES	210 211	215 216	*220 221 *222 *223	*240 241 242 *243 *244	250 *251 *252	310 *311 *312 *313	*200 *201 *202 *330 *331	*340 *341 *342 *343	260 261 320 *321 *322 323 *324 *325	

1. Some events are duplicated in more than one category but not in the overall total.
2. "*" Denotes a Refresher pilot or someone who needs to regain qualification(s).

f. Sorties Required To Maintain Core Skills Proficiency. After achieving core skill competency, a pilot is required to complete the following events (or sorties that chain these events) in each skill area annually to maintain core skill proficiency based on the refly interval. Per the T&R Manual, Administrative, chaining does not update delinquent events; completing Refresher events do not update incomplete events.

UH-1	TERF	NVD	CAL	SWD	ESCORT	ANSQ	CQ	FAC	TAC
SORTIES	1	1	1	2	2	2	1	4	5
T&R CODES	211	216	223	242 244	251 252	312 313	331	340 341 342 343	320 321 322 323 324 325

g. Flight Leader/Instructor Designations. To be considered Core Competent, a squadron must possess the following numbers of aircrew in the listed flight leadership/instructor categories. (Note: If the squadron is < T/O, required numbers are reduced by a like %)

DESIGNATION	SQDN TOTAL (23 PLTS)	SQDN TOTAL 19 C/C 17(A/O)
UHC	6	N/A
BIP	3	N/A
TERFI	3	3
WTO	3	N/A
SEC LDR	5	N/A
DIV LDR	1	N/A
FLT LDR	1	N/A
AMC	1	N/A
NSI	2	2
FAC(A)I	2	N/A
TAC(A) I	1	N/A
DACMI	2	2
WTI	3	2
C/C AGI	NA	3

h. Currency. A control measure used to provide an additional margin of safety based on exposure frequency to a particular skill. It is a measure of time since the last event demanding that specific skill. Loss of currency does not affect a loss of CRP. For example, currency determines minimum altitudes in rules of conduct based upon the most recent low altitude fly date. Specific currency requirements for individual type mission profiles can be found in chapter 5 of the T&R Manual, Administrative.

i. Proficiency. A measure of achievement of a specific skill. Units shall emphasize proficiency training in core competencies. Refly factors establish the maximum time between demonstration of those particular skills. CRP is a measurement of “demonstrated proficiency.” If an aircrew member exceeds the refly factor for a particular event, the individual loses CRP for that particular event. To regain proficiency, an individual shall complete the delinquent events with a proficient crewman/flight lead. If an entire unit loses proficiency, unit instructors shall regain proficiency by completing an event with an instructor from a like unit. If this is not feasible, the instructor shall regain proficiency by completing the event with another instructor. If a unit has only one instructor and cannot complete the event with an instructor from another unit, he shall regain proficiency with another aircraft commander or as designated by his commanding officer.

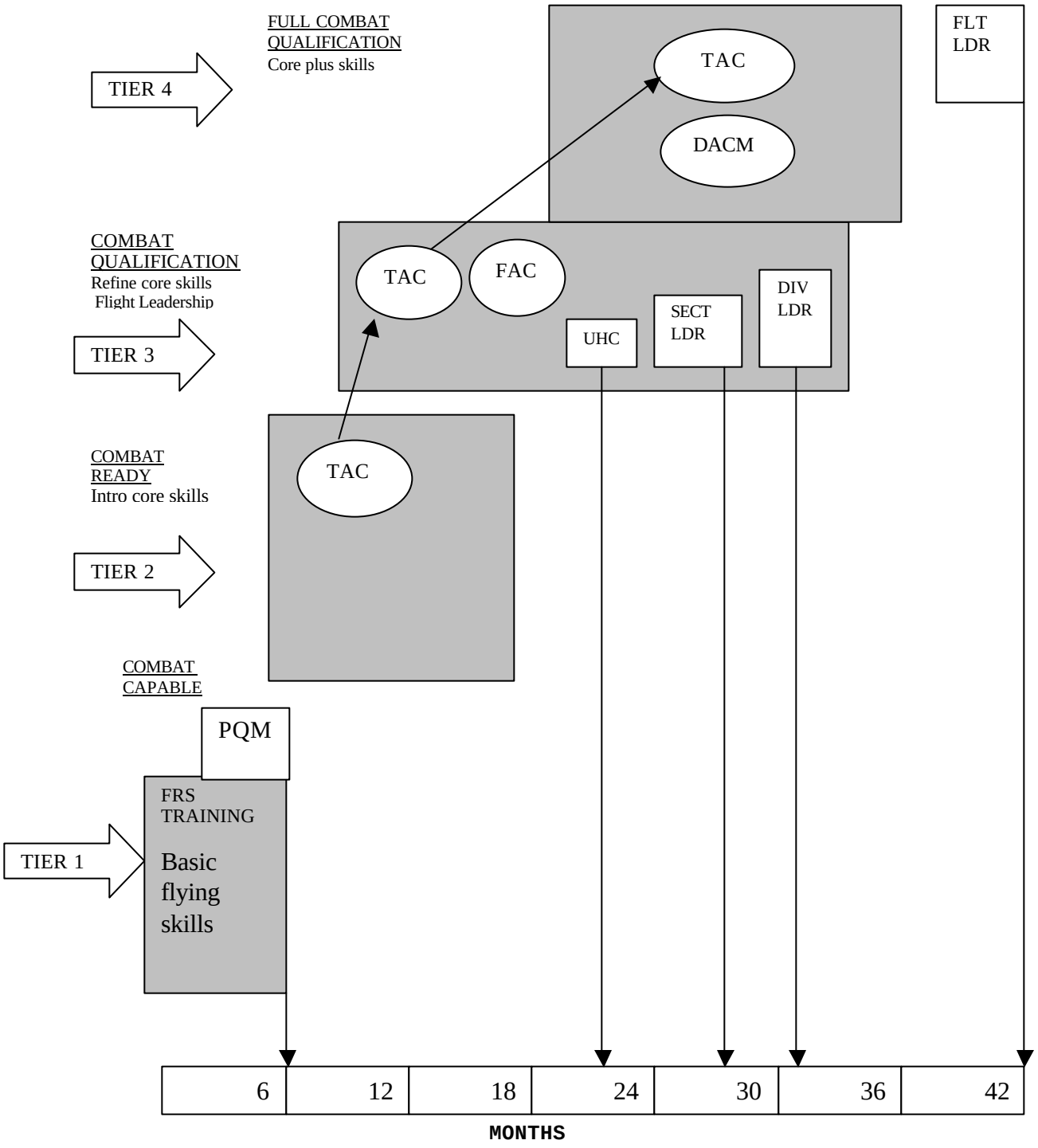

Figure 1-1.--Notional UH-1N Training Progression Model.

101. PROGRAMS OF INSTRUCTION (POI) FOR BASIC AND TRANSITION PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-20	Combat Capable Phase	Training Squadron
21-31	Combat Ready Phase	Tactical Squadron
32-41	Combat Qualification Phase	Tactical Squadron
42-52	Full Combat Qualification Phase	Tactical Squadron

102. POI FOR CONVERSION PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-10	Combat Capable Phase	Training Squadron
11-17	Combat Ready Phase	Tactical Squadron
18-24	Combat Qualification Phase	Tactical Squadron
25-32	Full Combat Qualification Phase	Tactical Squadron

103. POI FOR REFRESHER PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-9	Combat Capable Phase	Training Squadron
10-16	Combat Ready Phase	Tactical Squadron
17-21	Combat Qualification Phase	Tactical Squadron
22-27	Full Combat Qualification Phase	Tactical Squadron

104. POI FOR MODIFIED REFRESHER PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-2	Interactive Courseware	Training Squadron
3-6	Combat Capable Phase	Training Squadron
*	Combat Ready Phase	Tactical Squadron
*	Combat Qualification Phase	Tactical Squadron
*	Full Combat Qualification Phase	Tactical Squadron

** = Modified Refresher stages are based upon the full Refresher syllabus modified at the discretion of the squadron commander.*

105. POI FOR FRS INSTRUCTOR PILOT

WEEKS	COURSE/PHASE	ACTIVITY
1-4	Instructor Pilot Flight Training	Training Squadron

110. GROUND/ACADEMIC TRAINING

1. Ground training requirements are listed separately for each phase of flight training. Training may be completed earlier in stage but should be completed by the appropriate sortie(s). The following describes the courses:

a. Interactive Courseware (ICW). This is a computer based training syllabus for Combat Capable training. It consists of both self-paced lesson and instructor-presented phase lectures.

b. Academic Support Package (ASP). These are MAWTS-1 prepared classes available on CD-ROM. All material is contained on CDs, both classified (ASP-C) and unclassified (ASP-U). These can be either self-paced lessons or instructor-presented lectures. The classes listed are only the Generic, Common or Specific UH-1N classes. Other ASP classes may be useful as well.

c. Computer Based Training (CBT). These are software and/or hardware computer training aids designed to augment training for specific systems. Examples include the Naval Air Warfare Center programs for CDNU, as well as other programs developed by various sources such as the CDNU Device Trainer, TISP, PFPS/JMPS, EOTDA, and ALE-39 trainers/programs.

d. Squadron Developed Training. Squadron-developed curriculum used to enhance the above programs. Recognition training will be continuous.

120. FLIGHT/SIMULATOR/EVENT TRAINING FOR BASIC/TRANSITION PILOT (RAC)

1. Combat Capable Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Basic Qualification	--	--	25.0/--
Familiarization	11/4	18.5/6.0	11.0/2.75
Instruments	3/3	5.5/4.5	3.0/2.25
Formation	3/0	5.5/0.0	3.0./0.0
Terrain Flight	2/0	3.0/0.0	2.0/0.0
Navigation	3/0	4.5/0.0	3.0/0.0
Specific Weapons Delivery	1/1	1.5/1.5	1.0/0.75
Confined Area Landings	3/0	4.5/0.0	3.0/0.0
External Weights	1/0	1.5/0.0	1.0/0.0
Combat Capable Check	1/1	2.0/1.5	1.5/0.75
TOTAL FOR PHASE	**28/9**	**46.5/13.5**	**53.5/6.5**
COMBINED TOTALS	**37**	**60.0**	**60**
ACCUMULATION FOR BASIC/TRANSITION POI	**37**	**60.0**	**60**

2. Combat Ready Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Field Carrier Landing Practice	2/1	2.0/1.5	1.0/0.0
Terrain Flight/Navigation	2/0	4.0/0.0	1.0/0.0
Night Vision Device	1/1	0.0/1.5	0.5/0.5
Confined Area Landings	4/0	6.0/0.0	3.0/0.0
Reconnaissance	2/0	3.0/0.0	1.0/0.0
Specific Weapons Delivery	4/1	6.0/1.5	4.0/0.5
Escort	3/0	4.5/0.0	1.5/0.0
Tactics	2/0	3.0/0.0	2.0/0.0
TOTAL FOR PHASE	**20/3**	**28.5/4.5**	**14.0/1.0**
COMBINED TOTALS	**23**	**33.0**	**15.0**
ACCUMULATION FOR BASIC/TRANSITION POI	**60**	**93.0**	**75.0**

3. Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Electronic Warfare	1/1	2.0/1.5	1.0/1.0
Advanced Night Systems Qualification	3/1	5.0/1.5	6.0/0.5
Tactics	6/0	9.0/0.0	8.0/0.0
Carrier Qualification	2/0	2.0/0.0	1.0/0.0
Forward Air Controller	4/0	7.5/0.0	2.5/0.0
TOTAL FOR PHASE	**16/2**	**25.5/3.0**	**18.5/1.5**
COMBINED TOTALS	**18**	**28.5**	**20.0**
ACCUMULATION FOR BASIC/TRANSITION POI	**78**	**121.5**	**95.0**

4. Full Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM	CRP ACFT/SIM
Helicopter Insertion/Extraction	7/0	7.0/0.0	1.4/0.0
Defensive Air Combat Maneuvering	7/0	8.5/0.0	2.5/0.0
Nuclear, Biological & Chemical	1/0	1.0/0.0	0.2/0.0
Carrier Qualification	1/0	1.0/0.0	0.2/0.0
Mountain Area Training	2/0	2.0/0.0	0.4/0.0
Tactics	1/0	1.5/0.0	0.3/0.0
TOTAL FOR PHASE	**19/0**	**21.0/0.0**	**5.0/0.0**
COMBINED TOTALS	**19**	**21.0**	**5.0**
TOTAL FOR BASIC/TRANSITION POI	**97**	**142.5**	**100.0**

121. FLIGHT/SIMULATOR/EVENT TRAINING FOR CONVERSION PILOT

1. Combat Capable Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Familiarization	8/4	13.5/6.0
Instruments	2/3	4.0/4.5
Formation	3/0	5.5/0.0
Terrain Flight	2/0	3.0/0.0
Specific Weapons Delivery	1/1	1.5/1.5
Confined Area Landings	3/0	4.5/0.0
External Weights	1/0	1.5/0.0
Combat Capable Check	1/1	2.0/1.5
TOTAL FOR PHASE	**21/9**	**35.5/13.5**
COMBINED TOTALS	**30**	**49.0**
ACCUMULATION FOR CONVERSION POI	**30**	**49.0**

2. Combat Ready Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Carrier Qualification	2/1	2.0/1.5
Terrain Flight/Navigation	2/0	4.0/0.0
Night Vision Device	1/1	0.0/1.5
Confined Area Landings	4/0	6.0/0.0
Reconnaissance	2/0	3.0/0.0
Specific Weapons Delivery	2/1	4.0/1.5
Escort	3/0	4.5/0.0
Tactics	2/0	3.0/0.0
TOTAL FOR PHASE	**18/3**	**26.5/4.5**
COMBINED TOTALS	**21**	**31.0**
ACCUMULATION FOR CONVERSION POI	**51**	**80.0**

3. Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Electronic Warfare	1/1	2.0/1.5
Advanced Night Systems Qualification	3/1	5.0/1.5
Tactics	5/0	7.5/0.0
Carrier Qualification	2/0	2.0/0.0
Forward Air Controller	4/0	7.5/0.0
TOTAL FOR PHASE	**15/2**	**24.0/3.0**
COMBINED TOTALS	**17**	**27.0**
ACCUMULATION FOR CONVERSION POI	**68**	**107.0**

4. Full Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Helicopter Insertion/Extraction	7/0	7.0/0.0
Defensive Air Combat Maneuvering	7/0	8.5/0.0
Nuclear, Biological & Chemical	1/0	1.0/0.0
Carrier Qualification	1/0	1.0/0.0
Mountain Area Training	2/0	2.0/0.0
Tactics	1/0	1.5/0.0
TOTAL FOR PHASE	**19/0**	**21.0/0.0**
COMBINED TOTALS	**19**	**21.0**
TOTAL FOR CONVERSION POI	**87**	**128.0**

122. FLIGHT/SIMULATOR/EVENT TRAINING FOR REFRESHER PILOT

1. Combat Capable Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Familiarization	4/3	7.0/4.5
Instruments	2/2	3.0/4.0
Terrain Flight	1/0	1.5/0.0
Specific Weapons Delivery	0/1	0.0/1.5
Confined Area Landings	2/0	3.0/0.0
Combat Capable Check	1/1	2.0/1.5
TOTAL FOR PHASE	**10/7**	**16.5/11.5**
COMBINED TOTALS	**17**	**28.0**
ACCUMULATION FOR REFRESHER POI	**17**	**28.0**

2. Combat Ready Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Field Carrier Landing Practice	2/1	2.0/1.5
Confined Area Landings	3/0	4.5/0.0
Reconnaissance	1/0	1.5/0.0
Specific Weapons Delivery	2/1	3.0/1.5
Escort	2/0	3.0/0.0
TOTAL FOR PHASE	**10/2**	**14.0/3.0**
COMBINED TOTALS	**12**	**17.0**
ACCUMULATION FOR REFRESHER POI	**29**	**45.0**

3. Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Electronic Warfare	1/0	2.0/0.0
Advanced Night Systems Qualification	3/0	5.0/0.0
Tactics	4/0	6.0/0.0
Carrier Qualification	2/0	2.0/0.0
Defensive Air Combat Maneuvering	2/0	2.0/0.0
Forward Air Controller	4/0	7.5/0.0
TOTAL FOR PHASE	**16/0**	**24.5/0.0**
COMBINED TOTALS	**16**	**24.5**
ACCUMULATION FOR REFRESHER POI	**45**	**69.5**

4. Full Combat Qualification Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Helicopter Insertion/Extraction	2/0	2.0/0.0
Defensive Air Combat Maneuvering	5/0	6.0/0.0
Carrier Qualification	1/0	1.0/0.0
Mountain Area Training	1/0	1.0/0.0
Tactics	1/0	1.5/0.0
TOTAL FOR PHASE	**10/0**	**11.5/0.0**
COMBINED TOTALS	**10**	**11.5**
TOTAL FOR REFRESHER POI	**55**	**81.0**

123. FLIGHT/SIMULATOR/EVENT TRAINING FOR MODIFIED REFRESHER PILOT

1. Combat Capable Phase

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Familiarization	4/2	7.0/3.0
Instruments	2/1	4.0/1.5
Specific Weapons Delivery	0/1	0.0/1.5
Confined Area Landings	1/0	1.5/0.0
Combat Capable Check	1/1	2.0/1.5
TOTAL FOR PHASE	**8/5**	**14.5/7.5**
COMBINED TOTALS	**13**	**22.0**
TOTAL FOR MODIFIED REFRESHER POI	**13**	**22.0**

Note: *The remaining Modified Refresher stages are based upon the Full Refresher syllabus modified at the discretion of the squadron commanding officer.*

124. FLIGHT/SIMULATOR/EVENT TRAINING FOR INSTRUCTOR TRAINING

STAGE	NO. EVENTS ACFT/SIM	NO. HOURS ACFT/SIM
Basic Instructor Pilot	5/1	7.0/1.5
Terrain Flight Instructor	2/0	3.0/0.0
Weapons Training Officer	2/0	3.0/0.0
TOTAL	**9/1**	**13.0/1.5**
COMBINED TOTALS	**10.0**	**14.5**
TOTAL FOR INSTRUCTOR TRAINING	**10.0**	**14.5**

125. GRADUATE LEVEL COURSES. There are six graduate level courses which qualify instructors for specific portions of the T&R syllabus. Requirements for instructor certification are contained in the MAWTS-1 Course Catalog: FAC(A)I, DACMI, NSFI, NSSI, NSI, and WTI.

130. GROUND/FLIGHT/SIMULATOR EVENT PERFORMANCE REQUIREMENTS

1. General

a. This Manual generalizes mission guidance to allow for local conditions and to allow this Manual to remain unclassified. DC AVN and CG MCCDC encourage squadrons to use the full range of tactics in the UH-1N TACMANs and adopt the latest developed and proven tactics.

b. Compliance with written flight description is mandatory for syllabus flight completion. Per T&R Manual, Administrative, events may be listed as Aircraft preferred/Simulator optional - A/S, Simulator preferred/Aircraft optional - S/A, Aircraft only - A, or Simulator only - S. In the absence of a flight simulator, completion of a syllabus event is not required to

complete that stage. Completion of those events should be accomplished as soon as practiCal upon simulator availability. Should the command desire, simulator events can be flown as actual flight events for T&R credit. CRM will be stressed and evaluated throughout each stage.

c. All flights shall terminate with a comprehensive debrief with emphasis on aircrew performance using all evaluation techniques.

d. Initial syllabus events not annotated with an "N" or "NS" shall be conducted during daylight hours. Pilots shall fly events annotated with an "N" (Night) or "NS" (Night Systems) at least 30 minutes after official sunset. Pilots may fly events annotated with "(NS)" at night with NVDs or by day.

e. To the greatest extent possible, an annual E.P. review (RQRD-602) will be conducted in the same month as the annual NATOPS check (RQRD-601). In lieu of a UH-1N simulator, the SFAM-280 may be conducted verbally by a Instructor Pilot (IP) with the PUI in the aircraft cockpit.

f. The visual system must be incorporated with the simulator for completion of a syllabus event (except for instrument flights which can be flown without the visual system).

g. Networked Simulation. Linked simulator events require an approved tactical environment simulation and at least one additional, networked, man-in-the-loop simulator to meet the training objectives. A moving model controlled from the operator station does not satisfy the man-in-the-loop requirement.

2. Squadron Syllabus Assignment

a. Basic and Transition Syllabus. Basic and Transition pilots will be assigned to fly the entire syllabus. Conversion, Refresher, and Modified Refresher will fly the sorties designated by a "C," "R" and "M" respectively in the event description.

b. Refresher Syllabus. A Refresher syllabus is provided for personnel out of the cockpit for over 730 days (24 months). The Refresher syllabus is predicated on the experience of the Refresher pilot. A pilot in the Refresher syllabus should fly all "R" coded events; however, a Refresher pilot need not fly every event within a stage of training to be requalified in that stage. The commanding officer may tailor the Refresher syllabus to fit the experience of the Refresher pilot per T&R Manual, Administrative. When the "R" coded events within a stage of training are complete, the pilot may be credited with the CRP for the entire stage of training. This assumes that the Refresher has had previous proficiency in that stage of training. If the Refresher pilot has no previous proficiency in a stage or particular event, then the Refresher should fly the entire stage or all events not previously flown. The Refresher syllabus applies only up to the stage achieved during the prior tour. After that the pilot will complete the entire remaining syllabus. Prerequisites apply only to replacement aircrew and not to Refresher pilots.

c. Modified Refresher Syllabus. A Modified Refresher syllabus for personnel out of the cockpit for 486-730 days (16-24 months) can be individually tailored as specified by the commanding officer of the FRS. However, in no case will this syllabus be less than the minimum Modified Refresher syllabus shown here. Following the FRS, the Refresher should follow the Refresher syllabus described above; however, the commanding officer may tailor the Refresher syllabus to fit the experience of the Refresher pilot per T&R Manual, Administrative.

3. Aircrew Evaluation Flights. All pilots shall have a NATOPS evaluation form completed annually upon completion of the following:

a. NATOPS Check (CCX-181, RQRD-601). A designated NATOPS instructor or an assistant NATOPS instructor shall evaluate RQRD-601.

b. Instrument Check (RQRD-600). A member of the squadron instrument board shall evaluate RQRD-600.

4. Aircrew Training Forms (ATFs)

a. An ATF is required for any event completed by a Basic, Transition, Conversion, or Refresher pilot or as recommended by the squadron Standardization Board.

b. If the commanding officer has waived/deferred a syllabus sortie, the squadron training officer shall place a waiver/deferral letter in section 3 of the APR.

c. HMT-303 will maintain an ATF database that establishes minimum requirements for each syllabus event. Access for individual units will be possible at the HMT-303 website.

5. Instructor Requirements

a. The minimum instructor requirements are listed in the crew requirements section of each event.

b. For simulator events, the requirement for a squadron IP in addition to the Certified Simulator Instructor is at the discretion of the squadron. When practiCal, a copilot should be scheduled with the PUI for Crew Resource Management (CRM) proficiency.

c. To instruct any sortie the minimum requirements are Basic IP and “complete” in that stage.

6. Event Completion. Compliance with the written event description is mandatory for syllabus event completion. Times indicated for each event are only recommendations.

7. Sequence. Training should be accomplished by flying events within a stage in sequence and stages in sequence when practical.

8. Definitions

a. Discuss

(1) The IP shall discuss a procedure or maneuver during the brief, in-flight, or debrief.

(2) The PUI is responsible for knowledge of the applicable procedures prior to the briefing.

b. Demonstrate

(1) The IP performs the maneuver with accompanying description.

(2) The PUI observes the maneuver and is responsible for the knowledge of the procedures prior to the flight.

c. Introduce

(1) At his option, the IP may perform the maneuver with an accompanying description, or he may coach the PUI through the maneuver without demonstration.

(2) The PUI shall perform the maneuver with coaching as necessary and is responsible for knowledge of the procedures prior to the flight.

d. Review

(1) The IP observes and grades the maneuver without coaching the PUI. An airborne critique of the PUI's performance is at the option of the IP.

(2) The PUI is expected to perform the maneuver without coaching and devoid of procedural error at a level acceptable to warrant progress into the next stage of training.

131. COMBAT CAPABLE PHASE

1. Purpose. To develop a Combat Capable copilot. At the completion of this phase the PUI will be designated Pilot Qualified in Model (PQM), NATOPS qualified and rate the 7563 MOS as specified in the CCX-181.

2. General. Completion of this phase meets the requirements for the PUI to be designated a PQM. At the discretion of the squadron commanding officer a letter designating the PUI as PQM shall be placed in the NATOPS jacket, APR and a tracking code of RQRD-601 shall be logged. The PUI will have gained proficiency in FAM, INST, FORM, TERF, NAV, CAL and SWD. NVDs will be utilized during the FAM, FORM, TERF, NAV and CAL stages.

3. Familiarization (FAM)

a. Purpose. To develop familiarity with aircraft flight characteristics, limitations, and emergency procedures during day and night operations. To develop proficiency in all maneuvers and to instill basic CRM procedures throughout the familiarization stage.

b. General

(1) PUI must demonstrate proficiency with all shore based FAM procedures to include normal/emergency procedures and basic aircraft maneuvers. Additionally, the PUI must display a thorough knowledge of limitations and flight characteristics. During all stages, the PUI shall complete a weight and balance form before each sortie and present it to the IP for verification.

(2) To facilitate training, CC/CCUI/QO may be included on any FAM stage flights, as required.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Interactive Courseware, preflight and postflight, flight procedures, maneuver description, emergency procedures, course rules, familiarization stage lecture, open and closed-book NATOPS exams.

e. Flight and Simulator Event Training. (11 Sorties, 18.5 Hours/4 Simulator Periods, 6.0 Hours).

FAM-00 0.0 C R E 1 UH-1N STATIC

Goal. Familiarize the PUI with preflight, cockpit interior inspection, postflight inspection, weight and balance computations and emergency egress procedures.

Requirement

(1) Discuss maintenance department organization and the ADB.

(2) Demonstrate preflight, cockpit interior inspection, postflight inspection, weight and balance computations and emergency egress procedures.

Performance Standards. N/A.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI.

FAM-000 0.0 C R E 1 UH-1N STATIC

Goal. PUI will demonstrate the preflight, interior cockpit inspection, postflight, weight and balance and emergency egress.

Requirement

(1) Discuss CRM.

(2) Introduce blind cockpit checks, preflight, interior inspection, postflight inspection, weight and balance computations and emergency egress procedures.

Performance Standards. Without input from the IP, PUI completes an accurate weight and balance computation, screens and understands the function of the ADB, and conducts an aircraft preflight IAW UH-1N NATOPS and Maneuver Description Guide (MDG).

Prerequisite. ICW complete.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI.

SFAM-100 1.5 C R M E 1 UH-1N S

Goal. Familiarization with NATOPS checklists, flight procedures, and simulator introduction.

Requirement

(1) Discuss autorotative characteristics, dual/single engine failures, and basic CDNU procedures.

(2) Demonstrate/introduce NATOPS checklists and normal flight procedures including normal start, subsequent start, starting emergencies, ground emergency procedures, home field pattern environment familiarization, normal and steep approach, single/dual engine failures at altitude, autorotations, shutdown procedures, and engine wash procedures. PUI shall perform a blindfold cockpit check.

Performance Standards. PUI shall demonstrate familiarity with checklists, start procedures and emergency procedures.

Prerequisite. FAM-000.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

FAM-101 1.5 C E 1 UH-1N A

Goal. UH-1N introduction. PUI conducts a normal start, normal in-flight procedures and emergency procedures.

Requirement

(1) PUI shall perform a thorough preflight, cockpit inspection, and postflight with accompanying description.

(2) Brief/discuss engine fire on start/shutdown (hotstart), normal pattern procedures, engine shutdown in flight, engine restart, engine to transmission driveshaft failure, engine driven fuel pump failure, hot refueling, fire detection/ extinguisher system, emergency exits, first-aid kits, minimum crew requirements, prohibited maneuvers, and prohibited operations.

(3) Introduce engine start, hover power check, takeoff to a hover, takeoff from a hover, normal takeoff, low work, basic air work, normal approach, landing from a hover, no hover takeoff/landing and shutdown.

(4) Demonstrate autorotations (hover, taxi, straight-in, 90 and 180 degree) and simulated single/dual engine failures.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. SFAM-100.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

FAM-102 1.5 E 1 UH-1N A

Goal. Demonstrate/introduce takeoff and landing variations.

Requirement

(1) Brief/discuss land as soon as possible, land as soon as practical, precautionary landing, emergency radio calls, chip lights, fires (engine compartment, fuselage, electrical), smoke elimination, engine limitations, transmission limitations, autorotation airspeeds, torque limitations, Nf limitations, and Nr limitations.

(2) Introduce simulated single/dual engine failures and autorotations (hover, taxi, straight-in & 90 degree).

(3) Review engine start, hover power check, takeoff to a hover, takeoff from a hover, normal takeoff, low work, basic air work, normal approach, landing from a hover, no hover takeoff/landing, and shutdown.

(4) Demonstrate autorotations at minimum rate of descent and maximum glide airspeed, max power takeoff, steep approach, sliding takeoff/landing and high angle of bank maneuvering. PUI to complete a minimum of 5 autorotations.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-101.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

FAM-103 1.5 C E 1 UH-1N A

Goal. Introduce approach and landing variations.

Requirement

(1) Brief/discuss caution/warning lights, single instrument indications, electrical system, oil starvation, synchronized elevator failure, airspeed limitations, height/velocity diagram, and VNE chart.

(2) Introduce autorotations at minimum rate of descent and maximum glide airspeed, 180 degree autorotations, max power takeoff, steep approach, and sliding takeoff/landing.

(3) Review engine start, normal takeoff, normal approach, no hover takeoff/landing, crosswind takeoff/landing, hover power check, autorotations (hover, taxi, straight-in, 90 degree), simulated single/dual engine failures and shutdown. PUI to complete a minimum of 5 autorotations.

(4) Demonstrate single engine approach/landing, SCAS off flight/landing, and manual fuel operation.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-102.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

FAM-104 1.5 C E 1 UH-1N A

Goal. Review previous work and introduce alternate approaches and landings. Preflight inspection to be evaluated per NATOPS.

Requirement

(1) Brief and discuss generator failure, inverter failures, battery thermal runaway, SCAS malfunctions, Nf governor failures, hydraulics system, fuel system, auxiliary fuel system, fuel servicing, tail rotor malfunctions, applications of high angle of bank maneuvering, related effects of high density altitude and G-loading.

(2) Introduce SCAS off flight/landing, high angle of bank maneuvering, and manual fuel operation.

(3) Review start/shutdown, normal approach, steep approach, autorotations (including 180 degree autorotations and hovering/taxiing), sliding landing/takeoff, no hover takeoffs/landings, simulated single/dual engine failures, takeoff from a hover and maximum power takeoff.

(4) Demonstrate high speed/low level approach, quick stop, low level autorotation and low rotor RPM hover.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-103.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

SFAM-105 1.5 C R M E 1 UH-1N S

Goal. Review aircraft ground and flight emergencies and NATOPS emergency procedures emphasizing those emergencies that cannot be duplicated in the aircraft.

Requirement. Introduction to aircraft emergencies and applicable NATOPS procedures.

Performance Standards. IAW UH-1N NATOPS.

Prerequisite. FAM-104.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

FAM-106 2.0 C R M E 1 UH-1N A

Goal. Review previously introduced maneuvers and procedures.

Requirement

(1) Brief and discuss drive train system (engine, transmission, C-box, main rotor, 90/42 degree gear boxes, tail rotor), mast bumping, vortex ring state, and collective bounce.

(2) Introduce simulated tail rotor malfunctions, high speed/low level approach, quick stop, low level autorotation, and APU start.

(3) Review normal approach, steep approach, no hover landings, autorotations (including hovering/taxiing), SCAS off flight/landing, simulated single/dual engine failures, maximum power takeoff, and manual fuel operation.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-105.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

FAM-107 2.0 C E 1 UH-1N A

Goal. Review all takeoff, approach, landing procedures and simulated emergencies from the left seat. Introduce internal weight (INTWT) and integration of crew chief.

Requirement

(1) Brief and discuss ditching, inadvertent IMC, compressor stall, blade stall, unusual vibrations, dynamic rollover, RPM warning system, simulated emergencies, hydraulic system malfunctions, communication equipment, hot/cold weather and high altitude operations, weight and balance to include cabin loading and effect of fuel burn on Center of Gravity. INTWT 1,000 lbs.

(2) Review low work, maximum power takeoff, normal approach, steep approach, sliding takeoff/landing, no hover takeoff/ landing, autorotations, high speed/low level approach, quick stop, tail rotor malfunctions, simulated single/dual engine failures and high angle of bank maneuvering.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

FAM-108 2.0 E 1 UH-1N A

Goal. Review takeoff, approach, and landing procedures.

Requirement

(1) Brief and discuss hydraulic system malfunction, communication equipment, hot weather operations, max gross weight operations, and high altitude operations. Minimum aircraft takeoff gross weight 10,000 lbs.

(2) Review normal approach, steep approach, sliding takeoff & landing, no hover takeoff & landing, quick stop, high speed low level approach, autorotations, simulated engine failures, SCAS off flight, max power takeoff, and manual fuel operation.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. IP/PUI (CC/CCUI).

SFAM-111 1.5 C R E 1 UH-1N S N

Goal. Introduce unaided night familiarization in the simulator.

Requirement

(1) Discuss electrical malfunctions, single/dual engine failures, and aircraft lighting.

(2) First half of this sortie will be a day/night EP review. Second half will introduce, at a lit airfield, night home field pattern familiarization, normal and steep approach, sliding takeoff & landing, no hover takeoff & landing, maximum power takeoff, manual fuel operation, SCAS off flight & landing, autorotations, and simulated single/dual engine failures.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

FAM-112 1.5 E 1 UH-1N A N

Goal. Unaided night introduction.

Requirement

(1) Brief and discuss electrical malfunctions, single/dual engine failures, aircraft lighting, aircrew coordination, caution and warning lights, fires, single instrument indications, inadvertent IMC, and lost plane procedures.

(2) Introduce, at a lit airfield, normal approach, steep approach, sliding takeoff & landing, no hover takeoff & landing, maximum power takeoff, manual fuel operation, SCAS off flight/landing, tail rotor malfunctions, autorotations, and simulated single/dual engine failures. PUI to complete a minimum of 5 autorotations.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. SFAM-111.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

FAM-113 1.5 C R M E 1 UH-1N A N

Goal. Introduction to unlit field operations.

Requirement

(1) Brief and discuss all previously introduced emergency procedures.

(2) Introduce landing to an unlit area.

(3) Review (at lit airfield) basic air work, normal approach, steep approach, low work, sliding takeoff & landing, no hover takeoff & landings, autorotations, simulated engine failure (single/dual), SCAS off flight & landing, manual fuel operation, and tail rotor malfunctions.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-112.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

SFAM-114 1.5 C E 1 UH-1N S NS

Goal. Introduce NVD techniques during HLL.

Requirement

(1) Discuss NVD preflight/adjustment/focusing, NVD eye lane, use of NVDs, NVD emergencies/malfunctions, aircraft emergencies while on NVDs, and CRM. Discuss NVD HUD operation and utilize the HUD.

(2) Introduce low work, takeoff & landing at an unlit field or remote landing site on NVDs. Integrate the NVD HUD on all maneuvers. Review CDNU functions.

Performance Standards. IAW UH-1N NATOPS, MDG and MAWTS-1 NVD Manual.

Prerequisite. NITE Lab.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

FAM-115 1.5 C R M E 1 UH-1N A NS

Goal. Introduce NVD techniques during HLL.

Requirement

(1) Brief and discuss the Light Level Planning Calendar Computer Program, cockpit lighting, external lighting, NVD scan, HLL, LLL, meteorological effects, and cultural lighting.

(2) Demonstrate/introduce takeoff to a hover, takeoff from a hover, normal takeoff, low work, basic airwork, normal approach, landing from a hover, and autorotations. PUI to complete a minimum of 5 autorotations.

(3) Review SFAM-114 in the aircraft.

Performance Standards. IAW UH-1N NATOPS, MDG and MAWTS-1 NVD Manual.

Prerequisite. SFAM-114.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFI/PUI/CC (CCUI).

FAM-118 2.0 C R M E 1 UH-1N A

Goal. FAM stage evaluation.

Requirement. PUI shall safely perform all familiarization stage maneuvers and emergency procedures.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM-108.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC/CCUI).

4. Instruments (INST)

a. Purpose. To develop proficiency in actual/simulated Instrument Meteorological Conditions (IMC).

b. General. Instrument sorties should be conducted under both day and night conditions. All instrument sorties, whether day or night, should be conducted under instrument conditions for the PUI, using an instrument hood when necessary. On flights flown under simulated instrument conditions, except at night, the PUI shall be hooded and the crew shall include a crew chief or qualified observer. A minimum of one flight should be conducted at night. Refresher pilots will complete their annual instrument check (RQRD-600) in conjunction with INST-125. Therefore, they will require their semi-annual minimums and Instrument Ground School (IGS) prior to INST-125. CC/QO optional for any INST stage flight not requiring a hood.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IGS, computer flight planning.

e. Flight and Simulator Event Training. (3 Sorties, 5.5 Hours/3 Simulator Periods, 4.5 Hours).

SINST-120 1.5 C 1 UH-1N S (N)

Goal. Introduce basic instrument flight.

Requirement

(1) Brief and discuss instrument checklist, vertigo, functions of primary/secondary instruments, electrical malfunctions, SCAS malfunctions, and instrument malfunctions.

(2) Introduce instrument checklist, Instrument Takeoff (ITO), level flight, level speed change, standard rate climbs/descents, standard/half standard rate turn patterns, oscar pattern, recovery from unusual attitudes, instrument autorotation and partial panel.

Performance Standards. IAW UH-1N NATOPS, MDG and NATOPS Instrument Flight Manual (NIFM).

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

SINST-121 1.5 C,R,M 1 UH-1N S (N)

Goal. Introduce instrument navigation.

Requirement

(1) Brief and discuss CDI, station passage, IAF, FAF, DME, holding entry/procedures, loss of TACAN during approach, time distance checks, station passage, missed approach, MDA, 40 degree lock-off, Height Above Airport (HAA), voice reports.

(2) Introduce Standard Instrument Departure (SID), TACAN/GPS tracking, radial change, arcing, holding, approach and missed approach, and point-to-point navigation.

(3) Review Instrument checklist, ITO, and partial panel.

Performance Standards. IAW UH-1N NATOPS, MDG and NIFM.

Prerequisite. SINST-120.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

SINST-122 1.5 C,R 1 UH-1N S (N)

Goal. Introduce radar approach procedures.

Requirement

(1) Discuss ground controlled approach (PAR and ASR), navigational instrument failure, transition from VMC to IMC, lost communication, HAA, Height Above Threshold (HAT), no gyro approach, visual and contact approach.

(2) Introduce ASR, PAR and no gyro PAR procedures. Emphasize voice communications and navigational instrument failure procedures and transition from VMC to IMC.

(3) Review filing/clearance procedures, SIDs, instrument autos and ITOs. PUI will perform a minimum of 3 precision approaches.

Performance Standards. IAW UH-1N NATOPS, MDG and NIFM.

Prerequisite. SINST-121.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

INST-123 1.5 1 UH-1N A (N)

Goal. Review basic instrument, TACAN and radar approach procedures.

Requirement

(1) Discuss criteria for alternate, filing below minimums, fuel consumption, true airspeed, ground speed, minimum fuel, emergency fuel and holding entry/procedures.

(2) Review TACAN tracking, radial change, arcing, holding, instrument approach, missed approach, point-to-point navigation and GCA procedures. Introduce UHF DF capability. PUI will perform a minimum of 2 approaches.

Performance Standards. IAW UH-1N NATOPS, MDG and Instrument Flight Manual.

Prerequisite. SINST-122.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC or QO).

INST-124 2.0 C,R,M 1 UH-1N A (N)

Goal. Review TACAN and GCA procedures.

Requirement. Plan, file, and fly an instrument flight. Emphasize enroute procedures and communication/navigation equipment failure. Terminate with an instrument approach.

Performance Standards. IAW UH-1N NATOPS, MDG and Instrument Flight Manual.

Prerequisite. SINST-122.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI (CC or QO).

INST-125 2.0 C,R,M E 1 UH-1N A/S (N)

Goal. Conduct instrument evaluation.

Requirement. Conduct PUI jacket review and ensure all ATFs are in the PUI APR.

(1) Discuss instrument flight publications, airspace classification, cloud clearances and visibility requirements, inflight filing procedures, annual and semi-annual instrument and approach minimums, DD-175, weather briefing requirements and spatial disorientation.

(2) Review weather planning/filing criteria, flight planning, instrument checklist, ITO and climb-out, SID, IFF/SIF operations, TACAN procedures, GCA procedures, unusual attitude, partial panel, airway navigation, voice reports, lost comm procedures, and instrument autorotation. PUI will perform a minimum of 1 approach.

(3) PUI plan and execute an instrument evaluation flight IAW OPNAV 3710. This sortie can fulfill requirements for annual instrument check if required and minimums have been met. Evaluate all phase maneuvers and emergencies.

Performance Standards. IAW UH-1N NATOPS, MDG and Instrument Flight Manual.

Prerequisite. SINST-120 through INST-124.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP(IFBM)/PUI (CC or QO).

5. Formation (FORM)

a. Purpose. To introduce formation flight and develop proficiency in parade and tactical formation maneuvers.

b. General. At the completion of this stage, the PUI will be proficient at formation takeoffs and landings, rendezvous, parade, cruise, combat cruise, lead change, and all formation maneuvers listed in the UH-1N NATOPS and MDG.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Formation stage lecture, UH-1N TACMAN and ICW.

e. Flight and Simulator Event Training. (3 Sorties, 5.5 Hours).

FORM-130 2.0 C 2 UH-1N A

Goal. Introduce formation flight.

Requirement

(1) Discuss FORM maneuvers, visual signals, lead change, inadvertent IMC, and crew coordination.

(2) Demonstrate/introduce section takeoff, parade and cruise formations, breakup and rendezvous, crossovers, climbs and descents, section landings, parade, cruise turns, change lead and repeat.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisite. FAM 106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC (CCUI or QO).

FORM-131 1.5 C 2 UH-1N A

Goal. Introduce tactical formations.

Requirement

(1) Discuss combat cruise, combat spread, lookout doctrine, wingman awareness/responsibilities, aircrew coordination, use of cover in turns, use of radius of turn, and tactical formation maneuvers.

(2) Demonstrate/introduce combat cruise, combat spread, TAC turns, break turns, split turns, in-place turns, digs and pinches, cross turns and center turns. Demonstrate ordnance delivery patterns and section CALS.

(3) Review formation maneuvers introduced in FORM-130.

Performance Standards. IAW UH-1N NATOPS and MDG.

Prerequisites. FORM-130.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC (CCUI or QO).

FORM-132 2.0 C 2 UH-1N A NS

Goal. NVD FORM introduction.

Requirement

(1) Discuss NVD formation flight, aircraft lighting, and visual cues.

(2) Introduce formation flight using NVDs. Review formation maneuvers introduced in previous formation sorties.

Performance Standards. IAW UH-1N NATOPS, MDG and MAWTS-1 NVD Manual.

Prerequisite. FAM-115, FORM-131.

Ordnance. N/A.

Crew. NSFI/PUI/CC (CCUI or QO).

6. Terrain Flight (TERF)

a. Purpose. To introduce low level, contour and NOE modes of TERF flight and develop proficiency in the application of TERF procedures.

b. General. PUI will demonstrate an understanding of the TERF modes (low level, contour, and NOE) and proficiency in low level, contour, and NOE flight maneuvers. PUI will also demonstrate basic knowledge of current threat systems and their applicability to TERF. PUI will compute weight and balance prior to each sortie. PUI will also demonstrate a solid knowledge of GPS/Doppler operations and use of the MDL if installed.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. TERF stage lecture, TACMAN, MDG and ICW.

e. Flight and Simulator Event Training. (2 Sorties, 3.0 Hours).

TERF-140 1.5 C,R 1 UH-1N A

Goal. Introduce TERF techniques.

Requirement

(1) Discuss TERF modes of flight, performance checks, masking/unmasking, turns about the nose/tail, engine failure HIGE/HOGE, loss of tail rotor authority, low "G" maneuvers, low altitude hazards, mast bumping and crew coordination.

(2) Demonstrate the TERF brief.

(3) Demonstrate/introduce low level, contour and NOE modes of flight to include performance checks, masking and unmasking, NOE quick stops, turns, bunts, and rolls.

Performance Standards. IAW UH-1N NATOPS, TACMAN, and MDG.

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. TERFI/PUI/CC (CCUI or QO).

TERF-142 1.5 C 1 UH-1N A NS

Goal. Introduce TERF techniques using NVDs.

Requirement

(1) Discuss NVD TERF techniques, night vision techniques, terrain reflectivity, night visual cues, meteorological considerations, NVD environmental considerations, aircraft preparation, and dark adaptation.

(2) Review all TERF-140 maneuvers using NVDs.

Performance Standards. IAW UH-1N NATOPS, MAWTS-1 NVD Manual and MDG.

Prerequisite. NITE Lab, FAM-115 and TERF-140.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. NSFI/PUI/CC (CCUI or QO).

7. Navigation (NAV)

a. Purpose. To develop the ability to conduct day/night navigation.

b. General. PUI must demonstrate the ability to navigate preplanned routes and identify positions using charts/maps at altitude and in the TERF environment. Mission Planning System (MPS) and available navigation systems shall be utilized to the greatest extent possible.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. NAV stage lecture, ICW and UH-1N TACMAN.

e. Flight and Simulator Event Training. (3 Sorties, 4.5 Hours).

NAV-150 1.5 1 UH-1N A

Goal. Introduce low level and contour TERF navigation.

Requirement

(1) Discuss low level navigation, contour navigation, route selection, checkpoint selection, and Joint Operations Graphic (JOG).

(2) Introduce navigation in the low level and contour mode to at least 5 predetermined contour terrain features using a 1:250,000 and 1:50,000 scale map. Navigate using terrain features rather than manmade objects. Stress checkpoint selection and use of prominent terrain features. Remain oriented within 500 meters.

Performance Standards. IAW the UH-1N TACMAN and MDG. PUI must arrive at each checkpoint within 1 minute of the planned time. Emphasize crew coordination and standard verbal descriptions of terrain and hazards. PUI will demonstrate proficiency in GPS/Doppler operations.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. BIP/PUI (CC/CCUI or QO).

NAV-151 1.5 2 UH-1N A

Goal. Introduce NOE TERF navigation.

Requirement

(1) Discuss NOE navigation, map preparation, distance estimation, terrain analysis, GPS systems, and application of lost procedures.

(2) PUI will perform a map study using a 1:50,000 map and navigate a predetermined route with a minimum of 5 checkpoints in the NOE mode.

Performance Standards. IAW UH-1N NATOPS, MDG. PUI to remain oriented within 500 meters. PUI must arrive at each checkpoint within 1 minute of the planned time. Successfully load route utilizing MDL (if available).

Prerequisite. TERF-140.

Ordnance. N/A.

External Syllabus Support. Authorized TERF Area.

Crew. TERFI/PUI/CC (CCUI or QO).

NAV-152 1.5 1 UH-1N A NS

Goal. Introduce navigation on NVDs using visual navigation techniques and GPS if available.

Requirement

(1) Brief and discuss night navigation considerations, electrical failures, lost plane procedures, boundaries, time distance checks, distance estimation, map legend information, map preparation, NATOPS standard data charts, and available GPS systems. Use MPS for route computation when available.

(2) Plan and navigate at 500 to 1,000 feet AGL to at least 10 preplanned checkpoints using 1:250,000 scale JOG (Air) maps. The first 5 checkpoints should be found without the use of any navaid other than a map; a navaid, such as the GPS can be used to find the remaining checkpoints. Checkpoints should have a minimum of 10 NM separation.

Performance Standards. IAW the UH-1N TACMAN and MDG. PUI to remain oriented within 1 NM. Successfully load route utilizing MDL (if available).

Prerequisite. FAM-115, NAV-150.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFI/PUI/CC (CCUI or QO).

8. Specific Weapons Delivery (SWD)

a. Purpose. To introduce SWD. IP will stress error analysis.

b. General

(1) At the completion of this stage, PUI will demonstrate proficiency in all ordnance delivery techniques.

(2) PUI shall develop the ability to deliver ordnance. Use both crew served and fixed forward delivery.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. SWD stage lecture and ICW on BCWD, UH-1N TACMAN.

e. Flight and Simulator Event Training. (1 Sortie, 1.5 Hours/1 Simulator Period, 1.5 Hours).

SSWD-160 1.5 C,R,M 1 UH-1N S

Goal. Conduct BCWD with rockets and fixed forward GAU-17.

Requirement

(1) Discuss weapons checklists, attack patterns, FRAG patterns, section operations, sighting procedures, malfunction procedures, use of ordnance delivery charts, and crew served weapons employment.

(2) Demonstrate/introduce cockpit procedures, aircrew coordination, and delivery profiles (to include hover, running and diving fire).

Performance Standards. IAW the UH-1N TACMAN and the MDG.

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

SWD-161 1.5 C 2 UH-1N A

Goal. Review BCWD with rockets, GAU-17/16, and M240 if available.

Requirement

(1) Discuss and brief weapons preflight, arming, safing procedures, jettison procedures, checklists, attack patterns, FRAG patterns, section operations, sighting procedures, weapons conditions, malfunction procedures, and the WERM formula.

(2) Demonstrate/introduce cockpit weapons procedures, aircrew coordination, weapons preflight, arming, safing procedures, sighting techniques, delivery procedures (to include hover, running and diving fire), dearming, and postflight.

Performance Standards. IAW the UH-1N TACMAN and MDG, PUI conducts correct weapons preflight, arming procedures, and ordnance delivery procedures.

Prerequisite. SSWD-160.

Ordnance. 14 2.75 inch rockets, 1500 7.62 mm GAU-17 and 500 .50 Cal GAU-16.

External Syllabus Support. Authorized aerial delivery range.

Crew. WTO/PUI/CC (CCUI/AG).

7. Confined Area Landings (CAL)

a. Purpose. To develop proficiency in performing takeoffs and landings in confined areas.

b. General. PUI must demonstrate the capability to safely takeoff and land in a confined area during day/night, unaided/aided.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Complete CAL stage lectures.

e. Flight and Simulator Event training. (3 Sorties, 4.5 Hours).

CAL-170 1.5 C 1 UH-1N A

Goal. Introduce confined area operations, to include HIE approaches.

Requirement

(1) Brief and discuss power settling, single engine power, airspeed charts, height velocity chart, landing zone brief, dynamic rollover, power computations, and aircrew coordination with emphasis on crew chief briefs and utilization.

(2) Demonstrate/introduce confined area takeoffs/landings (to include steep approaches), HIE approaches, slope landings, maximum power takeoffs, power checks (ground and airborne), and minimum rotor clearance approaches.

Performance Standards. IAW the UH-1N TACMAN and MDG.

Prerequisite. FAM-106.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC (CCUI).

CAL-171 1.5 C,R 1 UH-1N A

Goal. Introduce tactical CAL approaches.

Requirement

(1) Brief and discuss threat conditions, tactical approaches and departures, HIE considerations, and high altitude operations and considerations. Reference UH-1N TACMAN.

(2) Demonstrate/introduce tactical approaches and departures in a low and high threat environment.

(3) Review confined area takeoffs, landings, slope landings and HIE approaches.

Performance Standards. IAW the UH-1N TACMAN and MDG.

Prerequisite. CAL-170.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC (CCUI).

CAL-172 1.5 C,R,M 1 UH-1N A NS

Goal. Introduce night unaided to aided CALs.

Requirement

(1) Brief and discuss use of landing light, searchlight, brown out/white out, and effects of moisture. Emphasize aircrew coordination.

(2) Demonstrate/introduce takeoffs, approaches, normal landings, slope landings to a lit or unlit confined area. Use aircraft and ground lighting systems when available.

Performance Standards. IAW the UH-1N TACMAN and MDG.

Prerequisite. FAM-113, FAM-115, CAL-171.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSFI/PUI/CC (CCUI or QO).

8. External Weights (EXT)

a. Purpose. To develop the ability to safely conduct external cargo and hoist operations.

b. General. The PUI shall perform proper hook and hoist operations. Demonstrate the ability to hold a precision hover, safely conduct external pickups, deliveries, and hoist operations. Reference OH-5-3A Helicopter External Cargo Loading Manual for external operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. N/A.

e. Flight and Simulator Event Training. (1 Sortie, 1.5 Hours)

EXT-175 1.5 C 1 UH-1N A

Goal. Introduce external load procedures.

Requirement

(1) Brief and discuss engine failures, inadvertent IMC, hook/hoist capabilities/limitations, aircrew coordination, HST teams, ground crew brief, and load jettison.

(2) Demonstrate/introduce proper techniques for external and hoist pickup.

Performance Standards. IAW the UH-1N TACMAN and MDG.

Prerequisite. FAM-108.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC.

9. Combat Capable Check (CCX)

a. Purpose. To review all areas of instruction, demonstrate proficiency and knowledge of all maneuvers to certify the PUI as PQM and Combat Capable.

b. General. PUI shall demonstrate proficiency throughout the Combat Capable phase. Upon completion of the evaluation event, the PUI may be designated as PQM IAW the UH-1N NATOPS Manual. CCX-181 meets the qualifications for the 7563 MOS and will serve as the initial NATOPS evaluation (RQRD-601).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. N/A.

e. Flight/Simulator Training. (1 Sortie, 2.0 Hours/1 Simulator Period, 1.5 Hours).

SCCX-180 1.5 C,R,M 1 UH-1N S

Goal. Review aircraft normal and emergency procedures.

Requirement

(1) Emphasis will be placed on aircraft and emergency procedures knowledge, recognizing emergencies, applying appropriate procedures, and power recovery/full autorotations. PUI shall demonstrate the ability to operate the aircraft under all emergency conditions.

(2) PUI is responsible for knowledge of all previously discussed/introduced items.

Performance Standards. IAW the UH-1N NATOPS, TACMAN and MDG.

Prerequisite. All 100-level stages complete.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

CCX-181 2.0 C,R,M E 1 UH-1N A

Goal. Combat Capable check.

Requirement

(1) Discuss responsibilities of the Pilot in Command (PIC) IAW OPNAV 3710.7, all previously introduced flight maneuvers, emergency procedures, aircraft limitations, and aircraft systems.

(2) PUI shall safely demonstrate flight proficiency and knowledge of all maneuvers and procedures covered in the Combat Capable phase commensurate with designation as PQM.

Performance Standards. IAW the UH-1N NATOPS, TACMAN and MDG.

Prerequisite. All Combat Capable stages complete.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. ANI/PUI/CC (CCUI).

132. COMBAT READY PHASE

1. Purpose. To produce a TERF and NSQ (HLL) qualified Combat Ready copilot.

2. General

a. Upon completion of this phase, the pilot will be TERF and NSQ (HLL) complete and may conduct additional missions as specified by the squadron commander.

b. Completion of TERF-211 meets the requirements for the PUI to be TERF qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as TERF qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-610 shall be logged.

c. Upon completion of all 200-level TERF and CAL night system sorties the pilot may be qualified NSQ (HLL) by the squadron commander. The DLQ stage is not required to be NSQ (HLL). At the discretion of the squadron commanding officer a letter assigning the PUI as NSQ (HLL) qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-611 shall be logged.

3. Ground Training. The ground training requirements are listed per stage of training, and must be completed prior to the associated stage or flight. Squadrons may schedule training earlier in phase to allow maximum student participation.

4. Field Carrier Landing Practice (FCLP)

a. Purpose. To introduce flight operations from a carrier deck or air capable ship during day and night using the simulator and by introducing day and night FCLPs.

b. General. The IP will demonstrate/introduce proper communication procedures, patterns, and aviation operations in the shipboard environment. Refer to appropriate NATOPS and LHA/LPH/LHD NATOPS Manuals for shipboard operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. CQ stage lectures (Squadron).

e. Flight/Simulator Training. (2 Sorties, 2.0 Hours/1 Simulator Period, 1.5 Hours).

SFCLP-200 1.5 C,R 1 UH-1N S N NS

Goal. Introduce day, night, and NVD shipboard procedures.

Requirement

(1) Discuss the shipboard environment/procedures, EPs, Alpha, Charlie, and Delta patterns, shipboard instrument procedures including TACAN, Carrier Controlled Approaches (CCA), marshals, lost comm procedures, sight picture, and landings to an L-Class amphibious ship.

(2) Demonstrate/introduce patterns, approaches, visual signals, communications, and landings to an L-Class amphibious ship.

(3) Conduct a minimum of 5 CQ landings of each type to an L-Class Amphibious ship.

Performance Standards. IAW the UH-1N NATOPS and shipboard NATOPS manuals.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

FCLP-201 1.0 C,R 1 UH-1N A

Goal. Introduce day FCLP operations.

Requirement

(1) Discuss air capable ships, shipboard specific crew coordination, LSE signals, emergency and ditching procedures, wind limitation charts, shipboard terminology, patterns, entry/exit procedures, HERO conditions, and shipboard airspace.

(2) Demonstrate/introduce patterns, sight picture, and landings to an FCLP deck.

(3) A minimum of 5 landings will be conducted.

(4) Review shipboard EPs and patterns.

Performance Standards. IAW the UH-1N NATOPS and shipboard NATOPS manuals.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. FCLP pad.

Crew. BIP/PUI/CC.

FCLP-202 1.0 C,R 1 UH-1N A N NS

Goal. Introduce night and NVD FCLP operations.

Requirement. Discuss instrument scan, night/NVD patterns, shipboard crew coordination, comfort level, NVD failures and emergency procedures, lighting considerations, vertigo and shipboard instrument procedures. Demonstrate/introduce night aided/unaided FCLP patterns, approaches, and landings. Review communication procedures and visual signals. A minimum of 5 unaided and 5 aided landings will be conducted.

Performance Standards. IAW the UH-1N NATOPS and shipboard NATOPS manuals.

Prerequisite. FCLP-201.

Ordnance. N/A.

External Syllabus Support. Lighted/NVD compatible FCLP pad.

Crew. NSI/PUI/CC/AO.

5. Terrain Flight/Navigation (TERF)

a. Purpose. To refine proficiency in Terrain Flight and Navigation.

b. General. PUI shall be TERF qualified prior to proceeding to follow-on stages, not to include simulator events. PUI will demonstrate proficiency in Terrain Flight and Navigation. Once complete in this stage, the pilot may be TERF qualified (QUAL-610) in writing at the discretion of the commanding officer.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight/Simulator Training. (2 Sorties, 4.0 Hours).

TERF-210 2.0 C 2 UH-1N A

Goal. Review TERF maneuvers and navigation.

Requirement

(1) Discuss terrain appreciation, effective CRM during navigation, terminology, load computations and HIGE/HOGE requirements, squadron tactical SOP, terrain flight tactical application and operation, high gross weight handling characteristics, and obstacle avoidance.

(2) Demonstrate/introduce all three modes of TERF, loading and operation of the Mission Data Loader (MDL), and proper CRM during TERF.

(3) Review all TERF maneuvers. Conduct a route brief.

(4) Conduct a navigation route with a minimum of 5 checkpoints utilizing a 1:50,000 scale map minimum length 20 NM.

Performance Standards. Remain oriented within 500 meters and within 1 minute of planned time. Conduct all TERF maneuvers IAW the UH-1N TACMAN and NATOPS.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. Authorized TERF route.

Crew. TERFI/PUI/CC/AO.

TERF-211 2.0 C E 2 UH-1N A NS

Goal. Review TERF maneuvers and navigation using NVDs.

Requirement

(1) Discuss SOP light configurations, NVD focus procedures, EPs at night, TERF maneuvers at night, NVD scan patterns, effective CRM during navigation, and cultural lighting.

(2) Demonstrate/introduce proper NVD scan patterns, light configurations, NVD TERF flight/maneuvers, and effective CRM during navigation and obstacle avoidance.

(3) PUI will conduct a route brief. Conduct a minimum of 5 landings to an unimproved landing site.

(4) Conduct a navigation route with a minimum of 5 checkpoints utilizing a 1:50,000 scale map minimum length 20 NM.

Performance Standards. Remain oriented within 500 meters and within 1 minute of planned time. Conduct all TERF maneuvers IAW the UH-1N TACMAN and NATOPS.

Prerequisite. TERF-210.

Ordnance. N/A.

External Syllabus Support. Authorized TERF route.

Crew. NSI/PUI/CC/AO.

6. Night Vision Device (NVD)

a. Purpose. To develop and refine the use of all UH-1N night systems. This stage is designed to increase situational awareness, reduce pilot workload, enhance CRM and to increase familiarity with all LASER and IR pointer operations.

b. General. Upon completion of this stage the PUI will demonstrate proficiency to safely conduct NTIS and NVD HUD operational tasks during navigation, terrain flight, and aerial reconnaissance. Pilots will brief and discuss the CRM specific to UH-1N night systems.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review the UH-1N TACMAN, the MAWTS-1 NVD Manual, the appropriate MAWTS-1 Courseware and current NTIS Operator Manual. FLIR reconnaissance training shall be conducted on the current CBT.

e. Flight and Aircraft Event Training. (1 Sortie, 1.5 Hours/1 Static Aircraft Period, 1.0 Hour).

NVD-215 C 1 UH-1N STATIC NS

Goal. Familiarize the PUI with terminology, procedures and operation of the NTIS and NVD HUD.

Requirement. Brief and discuss FLIR, CDNU, HUD system components, operation and integration. Include standardized terminology, LASER considerations and CRM as it relates to NVD systems. Demonstrate NTIS power up, HCU operation and FLIR picture optimization (Grayscale, NUC, and Gyro Drift Null). Include all operating modes (FIT, Cage, etc.), LASER operation, and shutdown procedures.

Performance Standards. PUI shall exhibit sound systems knowledge IAW the TACMAN, MAWTS-1 NVD Manual, appropriate MAWTS-1 Courseware and current NTIS Operator Manual.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. External power supply.

Crew. NSI/PUI.

SNVD-216 1.5 C 1 UH-1N S NS

Goal. Utilize standardized terminology, procedures and operation of the NTIS and NVD HUD in simulated flight.

Requirement. Review standardized terminology, LASER considerations and CRM as it relates to NVD systems. Introduce NTIS power up, HCU operation and FLIR picture optimization. Include all operating modes (FIT, Cage, etc.), LASER operation, and shutdown procedures. While operating the HCU in flight the PUI will detect, recognize, identify, and track various objects and terrain features. Perform operation and programming of the NVD HUD.

Performance Standards. PUI shall execute sound systems knowledge IAW the UH-1N TACMAN, MAWTS-1 NVD Manual, appropriate MAWTS-1 Courseware and current NTIS Operator Manual. PUI will demonstrate proficiency in tracking targets through various flight profiles.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

7. Confined Area Landings (CAL)

a. Purpose. To develop the ability to conduct section confined area takeoffs and landings and complete tactical approaches during day and night operations.

b. General. PUI must be TERF complete prior to beginning this stage. Once complete in this stage, the pilot may be qualified in writing NSQ (HLL) by the squadron commander.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. CAL stage lectures (Squadron).

e. Flight/Simulator Training. (4 Sorties, 6 Hours).

CAL-220 1.5 C,R 2 UH-1N A

Goal. Perform section CALs and introduce HIE approaches.

Requirement. Brief and discuss threat conditions, tactical approaches/departures, HIE considerations, and high altitude operations. Introduce section tactical approaches into CAL sites from the lead and wingman positions. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. TERF-211.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC.

CAL-221 1.5 C 2 UH-1N A NS

Goal. Perform section CALs and introduce HIE approaches at night using NVDs.

Requirement. Brief and discuss threat conditions, tactical approaches/departures, HIE considerations, NVD HUD considerations and night operations. The introduction of NVD compatible landing zone lighting aids and the IR searchlight is recommended. Introduce night section tactical approaches into CAL sites in the lead and wingman positions. Review NVD HUD utilization. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. CAL-220.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/PUI/CC/AO.

CAL-222 1.5 C,R 2 UH-1N A

Goal. Conduct section CALs and introduce section TERF maneuvers.

Requirement. Conduct section tactical formation flight, CALs, tactical approaches, and section TERF maneuvering. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. CAL-220.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. TERFI/PUI/CC/AO.

CAL-223 1.5 C,R E 2 UH-1N A NS

Goal. Conduct section CALs and introduce section TERF maneuvers at night using NVDs.

Requirement. Conduct section tactical formation flight, CALs, tactical approaches, and section TERF maneuvering at night. A minimum of 4 landings will be accomplished as lead and 4 landings will be accomplished as the wingman. Evaluate ability to safely conduct all previously covered NVD operations.

Performance Standards. PUI shall demonstrate safe basic airwork, sound judgment, and situational awareness in the lead and wingman positions.

Prerequisite. CAL-221, CAL-222.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. NSI/PUI/CC/AO.

8. Reconnaissance (REC)

a. Purpose. To develop proficiency in reconnaissance operations, placing special emphasis on UH-1N systems.

b. General. The PUI will demonstrate proficiency in aircraft system employment for target detection/recognition/identification during reconnaissance operations. Emphasize sensor management during reconnaissance operations for target detection, recognition and identification.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 Sorties, 3.0 Hours).

REC-230 1.5 C,R 2 UH-1N A (NS)

Goal. Conduct air reconnaissance mission.

Requirement. Under varying threat conditions demonstrate point, line, area and route reconnaissance using all aircraft systems. PUI shall plan and brief this mission. Brief and discuss NTIS procedures, sensor management, and visual reconnaissance techniques. Include ground commander's information requirements, voice reports and video debrief. NTIS aircraft required.

Performance Standards. PUI will collect and deliver the desired information as dictated by the mission requirements.

Prerequisite. TERF-211, NVD-216, SWD flight as required.

Ordnance. 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares (ordnance optional).

External Syllabus Support. Thermally significant threat vehicles and LASER-authorized range, if available.

Crew. WTO (NSI)/PUI/CC (AG).

REC-231 1.5 C 1 UH-1N A NS

Goal. Detect, recognize, identify, track and engage selected targets in flight.

Requirement. Brief and discuss IR theory, VCR operation, and enroute and objective area target acquisition techniques. Demonstrate VCR operation, tape narration and video debrief. Review standardized terminology, LASER operations, and the programming/operation of the NVD HUD and CRM as it relates to NVD systems. IP will assign the targets to be detected, recognized, identified, tracked and engaged with the appropriate LASER. Operable NTIS required.

Performance Standards. PUI will detect, recognize, identify, track and engage targets through various flight profiles.

Prerequisite. TERF-211, NVD-215, NVD-216.

Ordnance. N/A.

External Syllabus Support. Thermally significant threat vehicles and LASER authorized range if available.

Crew. NSI/PUI/CC/AO.

9. Specific Weapons Delivery (SWD)

a. Purpose. To develop proficiency in specific weapons delivery.

b. General. At the completion of this stage, the PUI will have displayed proficiency at delivering ordnance and proper use of the NTIS under all

threat conditions. Emphasis will be on CRM while utilizing the ordnance systems.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 Sorties, 6.0 Hours/1 Simulator Period, 1.5 Hours).

SSWD-240 1.5 C,R 1 UH-1N S

Goal. Conduct BCWD with rockets and fixed forward GAU-17.

Requirement. Discuss weapons checklists, attack patterns, FRAG patterns, sighting techniques, malfunction procedures, and use of ordnance delivery charts. Review procedures, aircrew coordination, weapon malfunctions/emergencies and delivery profiles. PUI shall conduct hover fire, running fire, diving fire, long range marking, and illumination rocket delivery IAW the UH-1N TACMAN.

Performance Standards. PUI shall execute proper ordnance procedures and precise delivery profiles.

Prerequisite. TERF-211.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

SWD-241 1.5 1 UH-1N A

Goal. Day crew served weapons employment.

Requirement. Brief and discuss all UH-1N crew served weapons. Include CRM, crew served weapons employment, weapons conditions, weapons malfunctions and section ordnance delivery considerations. Introduce weapons preflight and crew served weapons arming/dearming considerations.

Performance Standards. PUI shall execute proper gunner control procedures IAW the UH-1N TACMAN.

Prerequisite. TERF-211.

Ordnance. 3000 7.62 mm GAU-17, 500 .50 Cal GAU-16, 400 7.62 mm M240, 20 Chaff, 20 Flares.

External Syllabus Support. Aerial gunnery range.

Crew. WTO/PUI/CC/AG.

SWD-242 1.5 1 UH-1N A NS

Goal. NVD crew served weapons employment.

Requirement. Review AG-231 at night using NVDs. Brief and discuss night ordnance considerations, IR pointers, and crew served weapons malfunctions. The IP will demonstrate the effects of weapons employment on NVDs. Utilize IR pointers if available.

Performance Standards. PUI shall execute proper gunner control procedures IAW the UH-1N TACMAN and MAWTS-1 NVD manual.

Prerequisite. SWD-241.

Ordnance. 3000 7.62 mm GAU-17, 500 .50 Cal GAU-16, 400 7.62 mm M240, 20 Chaff, 20 Flares.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/PUI/CC/AG.

SWD-243 1.5 C,R 2 UH-1N A

Goal. To develop proficiency at ordnance delivery.

Requirement

(1) Discuss weapon switchology with emphasis on ordnance trouble shooting, attack patterns, SOP ordnance procedures, use of rocket charts and delivery techniques, target fixation, ALE-39 components/functions and rocket/gun related emergency procedures.

(2) Demonstrate a RW CAS mission to include coordination with the terminal controller and section tactics.

(3) Review ordnance procedures, aircrew coordination, weapons preflight, arming/dearming, and clear and safe procedures. Employ rockets, fixed forward guns and crew served weapons in running and diving fire.

(4) Review all ordnance emergencies, CRM during ordnance evolutions, and HUD symbology.

Performance Standards. Successful employment of rockets at ranges from 500-2000 meters, exhibiting proper impact detection and adjustment to work towards effect on target while adhering to all range regulations.

Prerequisite. SWD-241.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares.

External Syllabus Support. Authorized aerial ordnance delivery range; terminal controller if available.

Crew. WTO/PUI/CC/AG.

SWD-244 1.5 C,R 2 UH-1N A NS

Goal. To develop proficiency at ordnance delivery using NVDs.

Requirement

(1) Brief and discuss 2.75 inch rocket motors, warheads and fuses. Include illumination considerations, section attack patterns, mutual support, IR CAS and IR pointer techniques, NVD sighting procedures, terminal control briefs and attack routing.

(2) Demonstrate a RW CAS mission to include coordination with the terminal controller and section tactics. Review ordnance procedures, effects of ordnance delivery on NVDs, aircrew coordination, weapons preflight and arming/dearming.

(3) Employ rockets, fixed forward guns and crew served weapons in running and diving fire.

Performance Standards. Successful employment of rockets at ranges from 500-2000 meters, exhibiting proper impact detection and adjustment to work towards effect on target while adhering to all range regulations.

Prerequisite. SWD-242, SWD-243.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares.

External Syllabus Support. Authorized aerial ordnance delivery range; terminal controller, if available.

Crew. NSI/PUI/CC/AG.

10. Escort (ESC)

a. Purpose. To develop proficiency in prescribed heliborne or surface escort formations and maneuvers per current tactical doctrine.

b. General. The pilot will develop a working knowledge of escort formations, maneuvers, and techniques associated with heliborne operations. Ordnance is optional for this stage of training. If ordnance is utilized, the PUI shall have completed the SWD flight corresponding to the ordnance load.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight/Simulator Training. (3 Sorties, 4.5 Hours).

ESC-250 1.5 C 2 UH-1N A

Goal. Demonstrate and introduce helicopter escort procedures.

Requirement

(1) Discuss advantages/disadvantages of attached/detached escort, formations, LZ clearance/coverage techniques and procedures, threat reaction SOPs, immediate action procedures, and escort/assault support terminology.

(2) Demonstrate/introduce escort responsibilities and current tactical doctrine during assault support operations. Introduce attached/detached/combined escort, escort/assault support mission planning and operations within the objective area/LZ.

Performance Standards. Exhibit a thorough understanding of escort responsibilities and assault support operations.

Prerequisite. TERF-211. If ordnance is utilized, the PUI shall have completed the SWD flight corresponding to the ordnance load.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares.

External Syllabus Support. One or more assault aircraft.

Crew. WTO/PUI/CC (AG).

ESC-251 1.5 C,R 2 UH-1N A NS

Goal. Demonstrate and introduce night helicopter escort using NVDs.

(1) Discuss night LZ clearance/coverage techniques and procedures, night escort techniques/procedures, lighting and threat detection/supporting arms coordination, fragmentation patterns, assault sectors of fire and escort/assault integration and deconfliction.

(2) Demonstrate/introduce tactical employment of ordnance around assault helicopters enroute to, and in the LZ (objective area), LZ coverage patterns and ordnance delivery procedures at night with NVDs.

Performance Standards. PUI will perform escort operations IAW the UH-1N TACMAN and MAWTS-1 NVD manual.

Prerequisite. ESC-250.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 GAU-16, 400 M240, 20 Chaff, 20 Flares.

External Syllabus Support. One or more assault aircraft.

Crew. NSI/PUI/CC/AO.

ESC-252 1.5 C,R 2 UH-1N A (NS)

Goal. Introduce surface force escort operations.

Requirement

(1) Discuss surface escort procedures and techniques. Emphasize tactical employment of ordnance in close proximity to surface vehicles, terminal controller procedures both in the enroute phase and in the objective area. Discuss ordnance fragmentation patterns, detailed fire support planning/integration with the supported unit. Introduce route

coverage patterns, actions in the objective area and ordnance delivery procedures.

(2) Discuss METT-TSL requirements, escort fire support coordination, overwatch techniques, methods of escort, route and objective clearance/coverage techniques and procedures.

Performance Standards. Exhibit a thorough understanding of surface escort responsibilities in support of the GCE scheme of maneuver.

Prerequisite. If ordnance is utilized, the PUI shall have completed the SWD flight corresponding to the ordnance load.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares.

External Syllabus Support. One or more land or sea surface vehicles.

Crew. WTO (NSI)/PUI/CC (AG).

11. Tactics (TAC)

a. Purpose. Conduct day/night tactical missions in various threat environments.

b. General. PUI will demonstrate the knowledge and ability to conduct selected missions from the UH-1N Mission Essential Task List (METL).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 Sorties, 3.0 Hours).

TAC-260 1.5 C 1 UH-1N A (NS)

Goal. Conduct a Command and Control (C&C) mission in support of an assault support mission.

Requirement. Brief and discuss nomenclature, operation, tactical employment of the ARC-210, SINCGARS/HAVEQUICK, remote control head, SATCOM, UAV RRS, MCA selection, fuel planning and AMC/TAC(A)/ASC (A) communications and responsibilities. This flight shall be flown in conjunction with a multiple aircraft operation. NTIS required if available.

Performance Standards. The PUI will demonstrate a solid understanding of the mission requirements and successfully assist the AMC/TAC(A)/ASC (A) in the execution of the mission.

Prerequisite. TERF-211, NSQ (HLL) if flown at night.

Ordnance. N/A.

External Syllabus Support. Assault Support Package (2 or more assault support aircraft)

Crew. WTO (NSI)/PUI/CC (AO).

TAC-261 1.5 C 2 UH-1N A (NS)

Goal. Conduct an assault support or maritime special operations mission.

Requirement. IP shall conduct mission brief to demonstrate tactical briefing and debriefing. Brief and discuss threat considerations, HIE techniques, tactical SOPs, ASE and deception plan. Emphasize assault support mission planning and execution to include the GCE SOM, HEALT/HWSAT, bump plan, PZ, LZ, crew served sectors of fire, MACO, emergency extract, immediate re-embarkation and lost communication signals. NTIS required if available.

Performance Standards. The PUI will demonstrate a solid understanding of the mission requirements and successfully support the GCE maneuver.

Prerequisite. CAL-222, NSQ (HLL) if flown at night.

Ordnance. 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares (ordnance optional).

External Syllabus Support. Helicopter escort and embarked Marines if available.

Crew. WTO (NSI)/PUI/CC (AG).

133. COMBAT QUALIFICATION PHASE

1. Purpose. To produce a Combat Qualified pilot. Upon completion of the Combat Qualification Phase, pilots shall be proficient in all core skills.

2. General. Upon completion of the Combat Qualification phase, pilots may be designated NSQ (LLL), Utility Helicopter Commander (UHC), CQ qualified, and Forward Air Controller Airborne [FAC(A)].

a. Completion of all ANSQ events meet the requirements for the PUI to be NSQ (LLL) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as ANSQ (LLL) qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-612 shall be logged.

b. Completion of all CQ events meet the requirement for the PUI to be CQ qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as CQ shall be placed in the NATOPS jacket, APR and tracking codes of QUAL-615/616 shall be logged.

c. Completion of the FAC stage meets the requirements for the PUI to be FAC(A) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as FAC(A) qualified shall be placed in the NATOPS jacket and APR and a tracking code of QUAL-624 shall be logged.

d. Completion of the Combat Ready phase and the EW, ANSQ and TAC stages through TAC-325 of the Combat Qualified phase and HIE-403 meet the requirements for the PUI to be eligible for the UHC designation. Upon completion of any previously flown TAC event and at the discretion of the squadron commanding officer a letter designating the PUI as a UHC shall be placed in the NATOPS jacket, APR and a tracking code of DESG-631 shall be logged.

3. Ground Training. The ground training requirements are listed per stage and must be completed prior to the associated stage/flight. Squadrons may schedule training earlier in stage to allow maximum student participation.

4. Electronic Warfare (EW)

a. Purpose. To introduce offensive/defensive electronic countermeasures, tactics, and employment of Aircraft Survivability Equipment (ASE).

b. General. An EW range and/or a TRTG/threat simulator shall be used. Use of a ship's RADAR system or MACCS facility may be substituted for non-simulator events.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 Sortie, 2.0 Hours/1 Simulator Period, 1.5 Hours).

SEW-300 1.5 C UH-1N S

Goal. ASE and EW introduction.

Requirement. Brief and discuss ASE system operations and counter-tactics per current tactical doctrine. Demonstrate and introduce tactical employment of aircraft ASE against preplanned and reactive targets.

Performance Standards. Use ASE IAW the UH-1N NATOPS and UH-1N TACMAN.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI (CP).

EW 301 2.0 C,R 1 UH-1N A

Goal. ASE and EW practical application.

Requirement

(1) Review APR-39, APR-44, ALQ-144, and ALE-39 systems operation. Review threat radar systems and their associated APR-39/44 indications. Review ALE-39 expendable characteristics.

(2) Discuss the capabilities/limitations/weapon envelopes of potential threat systems, radar resolution cells, radar horizons, terrain profile analysis and related tactical considerations. Conduct single aircraft against numerous ground threats. Demonstrate maneuvers necessary to avoid detection from enemy radar and infrared guided and optically tracked systems. Emphasize crew coordination and communications, and effectiveness of terrain masking to deny

acquisition. PUI shall incorporate all ASE to assist in early threat detection and application of appropriate tactics.

Performance Standards. Successfully operate and troubleshoot APR-39, APR-44, ALQ-144 and ALE-39 systems. Given a threat, load an appropriate ALE program.

Prerequisite. SEW-300.

Ordnance. 20 Chaff, 40 Flares.

External Syllabus Support. Manned EW range, TRTG, or remote radar emitter; LASER safe range if available.

Crew. WTO/PUI/CC/AO.

5. Advanced Night System Qualification (ANSQ)

a. Purpose. To develop proficiency during LLL operations.

b. General. At the completion of this stage, the PUI will effectively employ the UH-1N under LLL conditions. Once complete in this stage, the pilot may be qualified in writing NSQ (LLL) by the squadron commander, and may complete the remaining combat qualification NVD training under any light level condition.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 Sorties, 4.5 Hours/1 Simulator Period, 1.5 Hours).

SANSQ-310 1.5 C UH-1N S NS

Goal. Perform NVD and aircraft emergency procedures during LLL conditions.

Requirement

(1) Discuss crew comfort during LLL NVG operations and LLL scheduling restrictions. Discuss NVD effects encountered during LLL conditions. Discuss use of the searchlight (covert/overt) during emergency procedures.

(2) Introduce pattern work at unlit and lit landing sites. Introduce NVD/aircraft emergency procedures at unlit and lit landing sites. Introduce inadvertent IMC (IIMC) procedures.

(3) Conduct 5 landings at an unlit site, 5 landings at a lit site and 5 autorotations. Conduct NVD and aircraft emergencies. Conduct IIMC procedures.

Performance Standards. IAW NATOPS.

Prerequisite. NSQ (HLL).

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI/PUI.

ANSQ-311 2.0 C,R 1 UH-1N A NS

Goal. Perform NVD low work, pattern work and navigation during LLL conditions.

Requirement

(1) Discuss map preparation, checkpoint selection, and cultural lighting. Discuss aircraft external lighting configurations and options.

(2) Introduce basic low work and pattern work at an unlit field or remote landing site free from artificial illumination. Introduce NVD navigation techniques by planning and navigating a 5 checkpoint route utilizing a 1:250,000 map.

(3) Conduct 5 landings at an unlit field or remote landing site free from artificial illumination.

Performance Standards. Navigate a route consisting of a minimum of 5 checkpoints and 50 NM remaining oriented within 1 NM of flight planned route. Arrive at final checkpoint within 1 minute of assigned time. Utilize GPS for at least 2 legs of the route if available.

Prerequisite. SANSQ-310.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/PUI/CC/AO.

ANSQ-312 1.5 C,R 2 UH-1N A NS

Goal. Develop proficiency in navigation and TERF navigation using NVDs under LLL conditions.

Requirement. Brief and discuss crew coordination, comfort level and differences between HLL and LLL profiles. Conduct navigation route of at least 5 checkpoints and 20 NM under LLL conditions using a 1:250,000 JOG (AIR) chart and 1:50,000 tactical map in the low level, contour, and NOE flight modes. NTIS, NVD HUD equipped aircraft required if available.

Performance Standards. PUI will perform maneuvers IAW the MDG, UH-1N TACMAN and MAWTS-1 NVD Manual. PUI will remain oriented within 1 NM of course on the 1:250,000 scale map. PUI must remain oriented within 500 meters of the course line on the 1:50,000 scale map and arrive at the final checkpoint within 2 minutes of the planned time.

Prerequisite. ANSQ-311.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. NSI/PUI/CC/AO.

ANSQ-313 1.5 C,R E 2 UH-1N A NS

Goal. Develop proficiency in tactical formation flight, CALs and section tactics using NVDs during LLL conditions.

Requirement. Brief and discuss IMC, external aircraft lighting, hazards and night systems integration. Review TERF maneuvers in LLL conditions. Conduct section CALs and section tactics using NVDs in the low level, contour, and NOE flight modes. Perform a minimum of 4 CALs as lead and 4 CALS as the wingman. NTIS, NVD HUD equipped aircraft required if available.

Performance Standards. PUI will perform maneuvers IAW the MDG, UH-1N TACMAN and MAWTS-1 NVD Manual.

Prerequisite. ANSQ-311.

Ordnance. N/A.

External Syllabus Support. Authorized TERF area.

Crew. NSI/PUI/CC/AO.

6. Tactics (TAC)

a. Purpose. Conduct day and night tactical missions under MCCRES/MEU (SOC) standards in a permissive or nonpermissive environment.

b. General. Upon completion of the TAC stage and successful completion of DESG-631 (-2 in a tactical mission) the PQM may be designated a UHC at the discretion of the commanding officer.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. UH-1N TACMAN and appropriate MAWTS-1 Courseware.

e. Flight and Simulator Event Training. (6 Sorties, 9.0 Hours).

TAC-320 1.5 1 UH-1N A NS

Goal. Develop proficiency in ordnance delivery under LLL conditions while using NVDs.

Requirement. Emphasis on aircrew coordination, crew served weapons employment, weapons conditions, malfunctions, weapons preflight and arming/dearming.

Performance Standards. PUI shall demonstrate ability to effectively control gunners IAW the UH-1N TACMAN.

Prerequisite. SWD-242, ANSQ-313.

Ordnance. 3000 7.62 mm GAU-17, 500 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares.

External Syllabus Support. Aerial gunnery range.

Crew. NSI/PUI/CC/AO.

TAC-321 1.5 C,R 2 UH-1N A NS

Goal. Develop proficiency in ordnance delivery under LLL conditions while using NVDs.

Requirement. Brief and discuss crew coordination, target identification and objective area mechanics, rocket fragmentation patterns, comfort level, NVD ordnance delivery, and the use of illumination.

Performance Standards. PUI shall deliver ordnance that has effects on the assigned target and effectively control gunners IAW the UH-1N TACMAN.

Prerequisite. SWD-244, ANSQ-313.

Ordnance. 7 2.75 inch rockets (HE/Inert or Illumination), 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M-240, 20 Chaff, 20 Flares.

External Syllabus Support. Authorized aerial ordnance delivery range.

Crew. NSI/PUI/CC/AG.

TAC-322 1.5 C,R 2 UH-1N A NS

Goal. Develop proficiency escort maneuvers, techniques, and responsibilities during RW operations utilizing NVDs.

Requirement. Repeat ESC-251 under LLL conditions. PUI shall plan and brief the mission. Discuss tactical employment of ordnance, fragmentation patterns, RW formations and assault flight gunner procedures in the night environment. Emphasize coordination with supported units during planning. NTIS, NVD HUD equipped aircraft required if available.

Performance Standards. PUI will perform escort operations IAW the UH-1N TACMAN and MAWTS-1 NVD manual.

Prerequisite. ESC-251.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 GAU-16, 400 M240, 20 Chaff, 20 Flares.

External Syllabus Support. One or more assault aircraft, authorized aerial ordnance delivery range.

Crew. NSI/PUI/CC/AO.

TAC-323 1.5 C 2 UH-1N A (NS)

Goal. Conduct a TRAP mission.

Requirement. Conduct a TRAP mission using escort and assault support aircraft. NVDs shall be used if conducted at night. NTIS equipped aircraft required if available.

Performance Standards. PUI shall brief and lead IAW the UH-1N TACMAN.

Prerequisite. If flown during the day, TAC-261. If flown at night NSQ (HLL) or ANSQ-313 as appropriate for the light condition. Appropriate SWD sortie for ordnance configuration.

Ordnance. 7 2.75 inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M240, 20 Chaff, 20 Flares (if available).

External Syllabus Support. Assault support aircraft or escort aircraft if available, authorized aerial ordnance delivery range.

Crew. WTO (NSI)/PUI/CC/AO.

TAC-324 1.5 C,R 2 UH-1N A NS

Goal. Conduct troops in contact insert/extract mission at night with NVDs.

Requirement. Conduct a two or more aircraft heliborne assault in a nonpermissive and MINCOM environment.

Performance Standards. PUI shall brief and lead IAW the UH-1N TACMAN.

Prerequisite. ANSQ-313.

Ordnance. 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M240, 20 Chaff, 20 Flares.

External Syllabus Support. Escort aircraft optional and embarked troops if available.

Crew. NSI/PUI/CC/AO.

TAC-325 1.5 C,R 2 UH-1N A NS

Goal. Conduct a CAS mission under terminal control at night utilizing NVDs.

Requirement. Conduct a two or more aircraft CAS mission under terminal control.

Performance Standards. PUI shall brief and lead IAW the UH-1N TACMAN. Ordnance delivery should have effects on the assigned target and be delivered +/- 15 seconds of the assigned TOT.

Prerequisite. TAC-321 or SWD-244 as appropriate.

Ordnance. 14 2.75 rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 400 7.62 mm M240, 20 Chaff, 20 Flares.

External Syllabus Support. Ordnance delivery range and terminal controller.

Crew. NSI/PUI/CC/AO.

7. Carrier Qualification (CQ)

a. Purpose. To introduce day and night flight operations from a carrier deck or air capable ship day and night.

b. General. IAW applicable directives, IP will emphasize proper communication procedures, patterns, and aviation operations in the shipboard environment. Refer to appropriate shipboard NATOPS Manuals for carrier operations. PUI shall complete the FCLP stage prior to commencing this stage.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. CQ stage lectures (Squadron).

e. Flight and Simulator Event Training. (2 Sorties, 2.0 Hours).

CQ-330 1.0 C,R 1 UH-1N A

Goal. Conduct day shipboard landing qualification.

Requirement

(1) Discuss lost communication procedures. Discuss emergency procedures as related to shipboard environment.

(2) Introduce day shipboard operations.

(3) Review Alpha, Charlie and Delta patterns. Review shipboard instrument procedures.

(4) Conduct a minimum of 5 day shipboard landings. Conduct 1 precision and 1 non-precision approach if available. Conduct shipboard refueling if available.

Performance Standards. IAW UH-1N NATOPS.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. BIP/PUI/CC.

CQ-331 1.0 C,R 1 UH-1N A NS

Goal. Conduct NVD shipboard landing qualification.

Requirement

(1) Discuss ship airspace. Discuss shipboard ordnance operations.

(2) Introduce NVD shipboard operations.

(3) Review Alpha, Charlie and Delta patterns. Review shipboard instrument procedures.

(4) Conduct a minimum of 5 NVD shipboard landings. Conduct 1

precision and 1 non-precision approach if available. Conduct shipboard refueling if available.

Performance Standards. IAW UH-1N NATOPS.

Prerequisites. CQ 330.

Ordnance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. NSI/PUI/CC/AO.

8. Forward Air Controller (Airborne) [FAC(A)]

a. Purpose. To qualify PUI as a FAC(A) IAW applicable directives.

b. General. At the completion of this stage, the PUI will have demonstrated a thorough knowledge of the FAC(A) procedures used to control FW aircraft and supporting arms under varied environmental and threat conditions. At the completion of this stage the PUI may be designated a FAC(A) by the squadron commanding officer and will be assigned the tracking code of QUAL-624. For pilots returning directly from FAC tours, this stage may be abbreviated by the commanding officer based upon the pilot's terminal controller experience level. An aircraft control for the purpose of defining requirements is a mission that ends with a "cleared hot," "continue dry," or "abort" issued from the terminal controller. Credit for each control will go to both pilots.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. EWTG developed FAC(A) syllabus.

e. Flight and Simulator Event Training. (4 Sorties, 7.5 Hours).

FAC-340 1.5 C,R 1 UH-1N A

Goal. Introduce indirect fire supporting arms control.

Requirement. Operable FLIR if available.

(1) Discuss capabilities and limitations of indirect fire assets. Discuss SEAD procedures. Discuss LASER call for fire procedures.

(2) Introduce call for fire procedures. PUI will control indirect fire assets.

(3) Conduct a minimum of 3 fire missions, 2 of which shall be adjust fire missions.

Performance Standards. IAW applicable directives.

Prerequisites. N/A.

Ordnance. N/A.

External Syllabus Support. 1 indirect fire asset, live fire range and LASER safe range.

Crew. FAC(A)I/PUI/CC(AG).

FAC-341 2.0 C,R 2 UH-1N A

Goal. Introduce control of FW aircraft.

Requirement. UH-1N with operable FLIR if available.

(1) Discuss FW aircraft ordnance capabilities and limitations. Discuss crew coordination, task shedding and task sharing in the FAC(A) arena.

(2) Introduce integration of FW CAS assets into objective area mechanics. Introduce communication and control procedures. PUI will control FW CAS assets.

(3) Conduct a minimum of 4 controls.

Performance Standards. IAW applicable directives.

Prerequisites. N/A.

Ordnance. 7 x 2.75 inch (WP) rockets.

External Syllabus Support. 2 FW CAS aircraft with ordnance, live fire range and LASER safe range.

Crew. FAC(A) I/PUI/CC (AG).

FAC-342 2.0 C,R 2 UH-1N A NS

Goal. Introduce control of FW aircraft at night.

Requirement. UH-1N with operable FLIR if available. PUI will brief a FAC(A) game plan.

(1) Discuss FW aircraft sensor capabilities and limitations.

(2) Review integration of FW CAS assets into objective area mechanics. Review communication and control procedures. Review crew coordination, task shedding and task sharing in the FAC(A) arena. Pilot will control FW CAS assets.

(3) Conduct a minimum of 4 controls.

Performance Standards. IAW applicable directives.

Prerequisite. N/A.

Ordnance. 7 x 2.75 inch (WP) rockets.

External Syllabus Support. 2 FW CAS aircraft with ordnance, live fire range and LASER safe range.

Crew. NSI and FAC(A)I/PUI/CC (AG).

FAC-343 2.0 C,R 2 UH-1N (NS)

Goal. Introduce supporting arms consolidation.

Requirement. UH-1N with operable FLIR if available. Pilot will brief a FAC(A) game plan.

(1) Discuss fire support planning documents (target list worksheet, scheduling worksheet). Discuss weapon to target match.

(2) Review integration of multiple supporting arms assets into objective area mechanics. Review SEAD procedures. PUI will coordinate SEAD in support of FW target engagement.

(3) Conduct a minimum of 4 FW controls.

Performance Standards. IAW applicable directives.

Prerequisite. N/A.

Ordnance. 7 x 2.75 inch (WP) rockets.

External Syllabus Support. 2 FW CAS aircraft with ordnance, 1 indirect fire asset OR 1 section of RW aircraft separate from flight, live fire range and LASER safe range.

Crew. FAC(A) I (NSI)/PUI/CC (AG).

134. FULL COMBAT QUALIFICATION PHASE

1. Purpose. To certify the PUI in large scale integrated mission events; events having unique mission taskings; events having a low probability of execution in combat, or relatively high risk events.

2. General. The terms DACM and RWDACM/FWDACM are not IAW with T&R Manual, Administrative. Changes to reflect these terms are forthcoming.

a. Completion of the RWDACM stage meets the requirements for the PUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as RWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-618 shall be logged.

b. Completion of the FWDACM stage meets the requirements for the PUI to be FWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as FWDACM qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-619 shall be logged.

c. Completion of CQ-430 meets the requirement for the PUI to be unaided CQ qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as unaided CQ qualified shall be placed in the NATOPS jacket, APR and a tracking code of QUAL-617 shall be logged.

3. Helicopter Insertion/Extraction (HIE)

a. Purpose. To develop the ability to perform HIE operations.

b. General. Upon the completion of each HIE event the pilot will be considered capable of performing that particular mission.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review the applicable MAWTS-1 Courseware and corresponding chapter of the UH-1N TACMAN.

e. Flight and Simulator Event Training. (7 Sorties, 7.0 Hours).

HIE-400 1.0 C 1 UH-1N A (NS)

Goal. Introduce techniques for paradrop operations.

Requirement. Brief and discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. PUI shall conduct two paradrops of at least two jumpers.

Performance Standards. Perform paradrop maneuvers IAW the UH-1N TACMAN and appropriate HIE Manual.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. Jump Master and two jumpers.

Crew. BIP/PUI/CC (NSI/PUI/CC/AO).

HIE-401 1.0 C 1 UH-1N A (NS)

Goal. Introduce techniques for water insertion.

Requirement. Brief and discuss aircraft rigging, insertion and extraction techniques, aircrew coordination, and emergencies. PUI shall insert two sticks of two swimmers.

Performance Standards. Perform HIE maneuvers IAW the UH-1N TACMAN and appropriate HIE Manual.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. HRST Master and two swimmers.

Crew. BIP/PUI/CC (NSI/PUI/CC/AO).

HIE-402 1.0 C,R 1 UH-1N A

Goal. Introduce techniques for insertion/extraction using the Special Personnel Insertion/Extraction (SPIE) rig or Jacob’s Ladder.

Requirement. Brief and discuss aircraft rigging, insertion and extraction techniques, aircrew coordination, and emergencies. Complete three iterations consisting of an extract, transition to flight, and insert.

Performance Standards. Perform HIE maneuvers IAW UH-1N TACMAN and appropriate HIE Manual.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. HRST Master and two ropers.

Crew. BIP/PUI/CC.

HIE-403 1.0 C 1 UH-1N A

Goal. Introduce techniques for insertion by fastrope.

Requirement. Brief and discuss aircraft rigging, insert techniques, aircrew coordination, and emergencies.

Performance Standards. PUI will perform maneuvers IAW the UH-1N TACMAN, HIE Manual and local orders.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. HRST Master, ropers.

Crew. BIP/PUI/CC.

HIE-404 1.0 C 1 UH-1N A

Goal. Introduce techniques for insertion by rappelling.

Requirement. Brief and discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. Complete three insertions of two ropers.

Performance Standards. Perform HIE maneuvers IAW the UH-1N TACMAN and appropriate HIE Manual.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. HRST Master and two ropers.

Crew. BIP/PUI/CC.

HIE-405 1.0 C 1 UH-1N A

Goal. Introduce techniques for emergency rescue hoist and external load procedures.

Requirement

(1) Brief and discuss engine failures, tail rotor emergencies, inadvertent IMC, settling with power, aircraft rigging, hook capabilities, hoist capabilities, aircrew coordination, HST procedures, ground crew brief, emergencies, and load jettison.

(2) Demonstrate/introduce proper techniques for external loads and hoist pickup.

(3) Complete three iterations of hoist operations (extract) or three iterations of hook procedures (pick-up, transit, delivery).

Performance Standards. Conduct flight and hook/hoist procedures IAW the UH-1N NATOPS Manual, UH-1N TACMAN, HIE Manual, and local directives.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. Appropriate external weight.

Crew. BIP (NSI)/PUI/CC (AO).

HIE-406 1.0 C,R 1 UH-1N A NS

Goal. Introduce techniques for fastrope or rappel at night.

Requirement. Brief and discuss aircraft rigging, insertion techniques, aircrew coordination, and emergencies. Complete three insertions of at least two ropers.

Performance Standards. Perform HIE maneuvers IAW UH-1N TACMAN and appropriate HIE Manual.

Prerequisite. HIE-403 or HIE-404 as appropriate.

Ordnance. N/A.

External Syllabus Support. HRST Master and two ropers.

Crew. NSI/PUI/CC/AO.

4. Rotary Wing Defensive Air Combat Maneuvering (RWDACM)

a. Purpose. To demonstrate and introduce RWDACM and qualify the PUI as RWDACM complete.

b. General. At the completion of this phase, the PUI will be proficient in the conduct of the principles of RWDACM and have a thorough knowledge of weapons employment, aircraft control, and threat tactics of RW adversaries.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 Sorties, 5.5 Hours).

DACM-410 1.5 C 2 UH-1N A

Goal. Introduce air-to-air gunnery against a towed dart/ banner, shadow target, Moving Land Target, or Ground Land Target.

Requirement. Develop the flight skills necessary to engage a moving target.

Performance Standards. Successful engagement on two passes.

Prerequisite. SSWD-240 (if simulator is available), SWD-233.

Ordnance. 1,500 7.62 mm GAU-17, 500 .50 Cal GAU-16, 400 7.62 mm M240, and 5 2.75 inch flechette rockets (required if available).

External Syllabus Support. Any aircraft capable of being configured to tow a banner target, dart target, or capable of producing a shadow. Use a Ground Moving Target or Moving Land Target if towed banner or dart is not available.

Crew. WTO/PUI/CC/AG.

DACM-411 1.0 C,R 1 UH-1N A

Goal. Introduce 1 v 1 RWDACM.

Requirement

(1) Discuss concepts of energy maneuverability and specific excess power and their applicability to tactical considerations; concepts of the high and low yo-yo and the appropriate counter tactics to these maneuvers; weapons employment rules of thumb; range estimation techniques; line number setups; DACM training rules; crew coordination, aircraft control and flight leadership.

(2) Introduce capabilities/limitations and weapons envelopes of adversary RW aircraft.

(3) Conduct one complete line number sequence (from both friendly and adversary roles). Maintain aircraft control and NATOPS limitations.

Performance Standards. Execute proper reactions to RW threat attacks.

Prerequisite. N/A.

Ordnance. TACTS pod if available, 20 Flares.

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

DACM-412 1.0 C,R 2 UH-1N A

Goal. Introduce 2 v 1 helicopter DACM maneuvering.

Requirement

(1) Discuss weapons employment rules of thumb, range estimation techniques, line number setups, and DACM training rules; crew coordination, aircraft control and flight leadership; section tactics and roles and responsibilities of free and engaged; concept of the weave.

(2) Review capabilities/limitations and weapons envelopes of adversary RW aircraft. Review the concepts of energy maneuverability and specific excess power and their applicability to tactical considerations.

(3) Conduct one complete line number sequence (from both tactical lead and tactical wingman positions).

Performance Standards. Maintain aircraft control and NATOPS limitations. Execute proper reactions to RW threat attacks.

Prerequisite. DACM-411.

Ordnance. TACTS pod if available, 20 Flares.

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

DACM-413 2.0 C,R E 2 UH-1N A

Goal. Review 1 v 1 and 2 v 1 RWDACM.

Requirement

(1) Discuss crew coordination, aircraft control and flight leadership; section tactics and roles and responsibilities of free and engaged aircraft; concept of the weave.

(2) Review the concepts covered during DACM-411 and DACM-412.

(3) Conduct one complete line number sequence (from both tactical lead and tactical wingman positions). Maintain aircraft control and NATOPS limitations.

Performance Standards. Execute proper reactions to RW threat attacks.

Prerequisites. DACM-412.

Ordnance. TACTS pod if available, 20 Flares.

External Syllabus Support. One adversary helicopter and appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

5. Fixed Wing Defensive Air Combat Maneuvering (FWDACM)

a. Purpose. To demonstrate and introduce DACM techniques against a FW threat.

b. General. At the completion of this stage, the PUI will be proficient in the conduct of the principles of FWDACM and have a thorough knowledge of weapons employment, aircraft control, and threat tactics of FW adversaries.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (3 Sorties, 3.0 Hours).

DACM-414 1.0 C,R 1 UH-1N A

Goal. Introduce 1 v 1 FWDACM maneuvering.

Requirement

(1) Conduct RW v FW (1 v 1) DACM maneuvering IAW the MAWTS-1 DACM Manual.

(2) Discuss capabilities/limitations and weapon systems/ envelopes of adversary FW aircraft. Emphasize Ps/E-M, game plan, and procedures to counter the threat. Discuss FW air-to-ground, air-to-air, and attack profiles used against RW aircraft.

(3) PUI shall demonstrate knowledge of aircraft limitations and a basic understanding of 1 v 1 maneuvers.

Performance Standards. Execute proper reactions to FW threat attacks.

Prerequisite. N/A.

Ordnance. TACTS pod if available, 10 Chaff, 10 Flares.

External Syllabus Support. One FW adversary and telemetry range if available. Appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

DACM-415 1.0 C 2 UH-1N A

Goal. Introduce 2 v 1 FWDACM maneuvering.

Requirement

(1) Conduct RW v FW (2 v 1) DACM maneuvering. Stress crew coordination, comfort level, positive aircraft control, tactical formation maneuvering, lookout doctrine, common terminology, inter-aircraft coordination and mutual support.

(2) Discuss capabilities/limitations, weapon systems, envelopes, and likely FW tactics and counter tactics.

Performance Standards. Execute proper reactions to FW threat attacks.

Prerequisite. DACM-414.

Ordnance. Telemetry pod if available, 10 Chaff, 10 Flares.

External Syllabus Support. 1 FW adversary and telemetry range if available. Appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

DACM-416 1.0 C,R E 2 UH-1N A

Goal. Introduce 2 v 2 escort operations against FW aircraft.

Requirement

(1) Conduct RW escort operations versus a FW adversary (2 v 2). Emphasize sound escort tactics and tactical maneuvering of the assault aircraft during escort operations. Stress protection of the assault flight, crew coordination, positive aircraft control, lookout doctrine, common terminology, inter-aircraft coordination and mutual support.

(2) Discuss assault flight evasive tactics and escort responsibilities.

Performance Standards. Execute proper reactions to FW threat attacks.

Prerequisite. DACM-415.

Ordnance. TACTS pod if available, 10 Chaff, 10 Flares.

External Syllabus Support. Two FW adversary and one assault aircraft, if available, and telemetry range if available. Appropriate air-to-air training area.

Crew. DACMI/PUI/CC/AO.

6. Nuclear, Biological, and Chemical Warfare (NBC)

a. Purpose. To introduce the pilot to operations while wearing the aviator's NBC protective mask.

b. General. Flights in this stage will be flown to expand the capabilities of the aircrew in NBC operations.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review appropriate section of UH-1N TACMAN for information on the aviator’s NBC protective mask prior to flight. The pilot will complete AR-5 familiarization lecture and aircraft egress with mask. Discuss capabilities and disadvantages of NBC protective mask, to include AR-5 emergency procedures. Review all MOPP conditions.

e. Flight and Simulator Event Training. (1 Sortie, 1.0 Hour).

NBC-420 1.0 C 1 UH-1N A/S

Goal. AR-5 protective mask introduction.

Requirement. PUI wears the aviator’s protective mask during tactical flight profiles to include CALs and HIE approaches.

Performance Standards. Conduct simulator event IAW the NATOPS and UH-1N TACMAN.

Prerequisite. None.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP (CSI)/PUI.

7. Carrier Qualification (CQ)

a. Purpose. To introduce night unaided flight operations from a carrier deck or air capable ship.

b. General. IAW applicable directives, IP will emphasize proper communication procedures, patterns, and aviation operations in the shipboard

environment. PUI shall complete the FCLP stage prior to commencing this stage.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. CQ stage lectures (Squadron).

e. Flight and Simulator Event Training. (1 Sortie, 1.0 Hour).

CQ-430 1.0 C R E 1 UH-1N A N

Goal. Night unaided CQ introduction.

Requirement

(1) Discuss shipboard lighting. Discuss wind limitations.

(2) Introduce night shipboard operations.

(3) Review Alpha, Charlie, and Delta patterns. Review shipboard instrument procedures.

(4) Conduct a minimum of 5 night shipboard landings. Conduct 1 precision and 1 non-precision approach if available. Conduct shipboard refueling if available.

Performance Standards. IAW NATOPS.

Prerequisite. CQ-330.

Ordnance. N/A.

External Syllabus Support. Landing platform afloat.

Crew. NSI/PUI.

8. Mountain Area Training (MAT)

a. Purpose. To conduct flight training in mountainous environments.

b. General. Flights flown in this stage are designed to introduce the PUI to operations in a mountainous environment.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. Review appropriate sections of the UH-1N NATOPS and UH-1N TACMAN.

e. Flight and Simulator Event Training. (2 Sorties, 2.0 Hours).

MAT-450 1.0 C 1 UH-1N A

Goal. Introduce MAT to include HIE techniques.

Requirement

(1) Brief and discuss high altitude operations, loss of tail rotor effectiveness, turbulence, orographic lifting, and downdrafts.

(2) Perform 5 mountain area landings and 2 simulated HIE approaches in a mountain environment.

Performance Standards. Conduct mountain area landings IAW the UH-1N NATOPS and UH-1N TACMAN.

Prerequisite. N/A.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC.

MAT-451 1.0 C,R 1 UH-1N A NS

Goal. Introduce mountain area landings to include HIE techniques at night using NVDs.

Requirement. Review MAT-450.

Performance Standards. Conduct 5 mountain area landings and 2 HIE approaches IAW the UH-1N NATOPS, UH-1N TACMAN and MAWTS-1 NVD Manual.

Prerequisite. MAT-450.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NSI/PUI/CC/AO.

9. Tactical Air Coordinator Airborne [TAC(A)]

a. Purpose. Introduce and refine TAC(A) procedures.

b. General. At the completion of this stage, the PUI will demonstrate proficiency in the coordination of attack aircraft and multiple terminal controllers. At the completion of this stage, the PUI may be designated TAC(A) by the squadron commander (QUAL-625).

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW the MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (1 Sortie, 1.0 Hour).

TAC-470 1.5 C,R 1 UH-1N A (NS)

Goal. Conduct TAC(A) procedures with multiple terminal controllers.

Requirement. Perform coordination of attack aircraft and multiple terminal controllers. Receive attack briefings from the FAC/FAC(A) and assign appropriate CAS aircraft. Coordinate target mark and control with the FAC/FAC(A). Manage assigned airspace and provide command and control system with essential elements of information.

Performance Standards. Be able to accurately copy immediate JTAR, coordinate timely CAS in response to immediate request, and to pass CAS aircraft BDA via the C^3 system.

Prerequisite. QUAL-624, DESG-679.

Ordnance. N/A.

External Syllabus Support. Two CAS elements and two terminal controllers.

Crew. TAC(A)I (NSI)/PUI/CC (AO).

140. INSTRUCTOR UNDER TRAINING (IUT) FLIGHT/SIMULATOR/EVENT PERFORMANCE REQUIREMENTS

1. Purpose. To develop standardized IPs with the ability to teach flight skills requisite to qualification as a Full Combat Qualified pilot. UHC designation is required prior to starting this stage.

2. General. Upon completion of this phase of training the IUT may be designated a BIP, TERFI and WTO.

a. Completion of the BIP stage meets the requirements for the PUI to be designated a BIP. At the discretion of the squadron commanding officer a letter designating the IUT as a BIP shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-680 shall be logged.

b. Completion of the TERFI stage meets the requirements for the PUI to be designated a TERFI. At the discretion of the squadron commanding officer a letter designating the IUT as a TERFI shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-681 shall be logged.

c. Completion of the WTO stage meets the requirements for the IUT to be designated a WTO. At the discretion of the squadron commanding officer a letter designating the IUT as a WTO shall be placed in the NATOPS jacket, APR and a tracking code of IDSG-682 shall be logged.

d. All stages will be flown in the order listed. Prior to the completion of each stage of training, the IUT will be required to present a class from an applicable MAWTS-1 ASP lecture. Emphasis will be placed on error analysis, error correction, instructional technique, briefing and debriefing procedures.

3. Basic Instructor Pilot (BIP)

a. Purpose. To qualify the IUT to instruct basic FAM, INST, CQ and FORM.

b. General. IUT must be CQ complete to begin this stage of training. CQ qualification is not required for FRS BIP syllabus.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (4 Sorties, 6.5 Hours/1 Simulator Period, 1.5 Hours).

SBIP-500 1.5 E 1 UH-1N S

Goal. Emergency procedures standardization.

Requirement

(1) Discuss cockpit indications of all emergencies. Discuss this Manual.

(2) Review SFAM-105 stressing systems failures and emergencies. The IUT will demonstrate a thorough knowledge of aircraft systems and emergency procedures. Emphasize CRM during emergency procedures execution.

Performance Standards. IUT will correctly identify all emergency procedures and apply appropriate immediate action IAW NATOPS.

Prerequisite. DESG-631.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP (CSI)/IUT/(copilot if available).

BIP-501 1.5 E 1 UH-1N A (N)

Goal. Review all FAM stage maneuvers and FCLPs with emphasis on standardization IAW the UH-1N NATOPS, MDG, and LHA/LHD NATOPS.

Requirement

(1) Discuss instructional techniques.

(2) Demonstrate knowledge of preflight, local course rules and techniques of instruction for all familiarization maneuvers and shipboard operations. Emphasize shipboard approaches, patterns, landings, standardized maneuver descriptions, system failures, and emergencies. IUT will perform all FAM stage maneuvers. IUT will perform a minimum of 5 FCLPs.

Performance Standards. In performance of the maneuvers and FCLPs the IUT will be able to discuss proper parameters and techniques.

Prerequisites. DESG-631.

Ordnance. N/A.

External Syllabus Support. FCLP pad.

Crew. BIP/IUT.

BIP-502 1.5 E 1 UH-1N A (N)

Goal. IUT will demonstrate the ability to accurately identify and correct PUI BAW errors, tendencies, and procedural errors during FAM maneuvers.

Requirement. This flight shall be conducted at night if BIP-501 was flown in daylight.

(1) Discuss OPNAVINST 3710.7. IP will act as the PUI.

(2) Emphasize error detection and correction of airwork and procedure deficiencies.

Performance Standards. IUT will satisfactorily demonstrate the ability to recognize, analyze and correct all errors through demonstration or verbal commands.

Prerequisites. DESG-631.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/PUI/CC (AO).

BIP-503 1.5 E 1 UH-1N A/S (N)

Goal. IUT will demonstrate the ability to instruct in the instrument flight regime.

Requirement

(1) Discuss applicable instrument publications and squadron flight operations SOP.

(2) IP will act as PUI. IP will provide the IUT with an actual or notional instrument flight plan developed with intentional errors. A portion of the sortie will be conducted under positive control. IUT will satisfactorily demonstrate the ability to execute, analyze and correct all standard instrument maneuvers under actual or simulated IFR conditions.

(3) Review IFR flight planning and enroute procedures. Conduct a minimum of 1 instrument approach.

Performance Standards. IUT will correctly identify all errors in a flight plan provided by the IP. IUT will ensure that the PUI maintains established BAW parameters.

Prerequisites. DESG-631.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP/IUT.

BIP-504 1.5 E 2 UH-1N A

Goal. IUT will demonstrate the ability to instruct formation flight.

Requirement

(1) Discuss instructor briefing and debriefing techniques.

(2) The IUT will brief and lead the flight. The IP will act as the PUI for a portion of the parade and tactical sequences. The IUT will demonstrate all formation stage maneuvers with emphasis on instructional technique, accurate maneuver description, formation signals, and parade/tactical formation maneuvering.

Performance Standards. IUT will properly perform all briefed maneuvers from both lead and wingman position IAW the AH-1 NATOPS, MDG, and UH-1N TACMAN. IUT will be able to identify and correct abnormal parameters performed by the IP/PUI.

Prerequisites. DESG-631.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP and section leader/PUI/CC (AO).

BIP-505 1.0 E 1 UH-1N A

Goal. HIE/External Weight IUT.

Requirement

(1) Brief and discuss water insertion, paradrop, fastrope, rappelling, hoist operations, and the similarities between SPIE and externals.

(2) The IUT shall demonstrate HIE approaches, and if support assets are available, should perform the requirements of HIE-400, HIE-401, HIE-402, HIE-403, HIE-404 or HIE-405 as appropriate.

Performance Standards. Conduct flight IAW the UH-1N NATOPS Manual, the UH-1N MDG, and the UH-1N TACMAN.

Prerequisite. BIP-502.

Ordnance. N/A.

External Syllabus Support. HRST Master and ropers if available, external weight if available, and HST if available.

Crew. BIP/PUI/CC.

4. Terrain Flight Instructor (TERFI)

a. Purpose. To qualify the IUT as a TERF instructor.

b. General. IUT will be designated BIP and section leader prior to beginning TERFI training. IUT will demonstrate the ability to utilize MPS and appropriate tactical navigation systems. Upon completion of the TERF IUT stage, the IUT may be designated a TERFI by the squadron commander.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 Sorties, 3.0 Hours).

TERF-510 1.5 1 UH-1N A

Goal. Conduct all TERF maneuvers with emphasis on instructional technique.

Requirement

(1) Discuss crew coordination, comfort level, map preparation, and low altitude emergencies emphasizing single engine operation.

(2) Demonstrate all TERF maneuvers.

(3) Review tactical decisions to fly TERF and threat considerations behind TERF profiles. Review all TERF maneuvers.

Performance Standards. IAW the UH-1N NATOPS, MDG, and UH-1N TACMAN.

Prerequisites. DESG-649, IDSG-680.

Ordnance. N/A.

External Syllabus Support. Approved TERF area.

Crew. TERFI/IUT/CC/AO.

TERF-511 1.5 R E 2 UH-1N A

Goal. IUT will conduct TERF navigation in the low level, contour and NOE profiles with emphasis on instructional technique.

Requirement. IUT will plan, brief, and lead the flight. IUT will fly from the seat opposite of that flown during TERF-510.

(1) Discuss TERF navigation techniques and procedures, CRM, comfort level, and the illusions of terrain flight.

(2) Demonstrate the use of the GPS system as a back-up NAVAID. The IUT will brief a TERF route with a minimum of 5 checkpoints. Emphasis will be on tactical use of terrain to navigate to a specific objective area, and masking and unmasking profiles.

(3) Review boundary features including lateral limits and intermediate checkpoints.

Performance Standards. The IUT will navigate in the low level, contour and NOE profile, remaining oriented within 200 meters, arriving at the final checkpoint within 1 minute of the planned time.

Prerequisites. DESG-649, IDSG-680.

Ordnance. N/A.

External Syllabus Support. Approved TERF area and certified TERF route.

Crew. TERFI/IUT/CC/AO.

5. Weapons Training Officer (WTO)

a. Purpose. To qualify the IUT as a WTO.

b. General. IUT will be designated a TERFI prior to beginning WTO training. The WTO is qualified to instruct all phases of flight except those requiring FAC(A)I, NSFI, NSI, DACMI, or WTI qualifications. As such, the WTO shall demonstrate a sound knowledge of all aircraft weapon systems, threat systems and current tactics, as well as all TTPs within the Full Combat Qualification stage.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. IAW MAWTS-1 Course Catalog.

e. Flight and Simulator Event Training. (2 Sorties, 3.0 Hours).

WTO-520 1.5 2 UH-1N A (NS)

Goal. To qualify the IUT in day (night optional) gun and rocket delivery.

Requirement

(1) Brief and discuss weapons preflight, arming/dearming, error analysis, use of the CA-513E Optical Reflex Sight, rocket delivery charts, and weapons sighting techniques.

(2) Demonstrate the ability to instruct rocket and gun employment with emphasis on error analysis.

(3) Conduct all methods of ordnance delivery to include hover, running, and diving fire.

(4) Conduct ordnance delivery on scored range if available.

Performance Standards. Conduct flight IAW the UH-1N TACMAN. IUT shall demonstrate ability to deliver ordnance within 100 mils of Mean Point of Impact (MPI).

Prerequisite. IDSG-681.

Ordnance. 7 2.75-inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 10 Chaff, 10 Flares. 500 7.62 mm M240 can be substituted for one of the guns if necessary.

External Syllabus Support. Scored aerial gunnery range if available.

Crew. WTO (NSI)/IUT/CC/AG.

WTO-521 1.5 R E 2 UH-1N A (NS)

Goal. Tactical mission instruction.

Requirement

(1) Plan, brief, and execute a tactical mission in a permissive to non-permissive environment using MCCRES/MEU (SOC) standards. Emphasize threat analysis and actions in the objective area. Utilize ordnance if available.

(2) Evaluate IUT's ability to recognize, analyze, and correct nonstandard performance in the execution of 300-level tactical missions.

Performance Standards. Conduct flight IAW the UH-1N TACMAN, UH-1N NATOPS, and applicable local SOPs.

Prerequisite. WTO-520.

Ordnance. If available, 7 2.75-inch rockets, 1500 7.62 mm GAU-17, 300 .50 Cal GAU-16, 10 Chaff, 10 Flares. 500 7.62 mm M240 can be substituted for one of the guns if necessary.

External Syllabus Support. Scored aerial gunnery range if available.

Crew. WTO (NSI)/IUT/CC/AG.

150. REQUIREMENTS, QUALIFICATIONS, AND DESIGNATIONS

1. Purpose. To provide a vehicle for tracking codes associated with qualifications and designations.

2. General

a. "E"-coded flights are evaluation flights. "E"-coded flights in the 600-level phase may be logged in conjunction with any flight that completes its stage. For example, RQD-612 may be logged in conjunction with one of the flights in the following night 300-level stages: ESC, SWD, TAC, or FAC(A). However, CRP credit may be obtained by logging the appropriate training code(s) in the 200-400 level syllabus. Once the flight to attain the qualification/designation is complete, a letter from the squadron commanding officer awarding the qualification/designation shall be placed in the NATOPS and APR before that qualification/designation can be utilized.

b. After the commanding officer has designated the PUI in writing as a section lead or a division lead, the operations department shall log DESG-649 (section lead) and DESG-659 (division lead) respectively.

3. Ground Training. Per applicable directives.

RQRD-600 1.5 E 1 (UH-1N) A/S (N)

Goal. Conduct the annual instrument check.

Requirement. Successfully conduct the check IAW applicable directives.

Performance Standards. IAW the NATOPS and Instrument Flight Manual.

Prerequisite. IAW OPNAVINST 3710.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. BIP-IFBM (CSI)/PUI (QO).

RQRD-601 1.5 E 1 UH-1N (N)(NS)

Goal. Conduct annual NATOPS check.

Requirement. Successfully conduct the evaluation IAW applicable directives. Recommend that a portion of the NATOPS check be flown at night.

Performance Standards. Conduct flight IAW the UH-1N NATOPS Manual.

Prerequisite. IAW applicable directives.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. NI ANI (NSI reqr if PUI is not NSQ)/PUI.

RQRD-602 1.5 C,R UH-1N S

Goal. Review aircraft emergency procedures and systems failures.

Requirement. Review emergency procedures knowledge, recognizing emergencies, applying appropriate procedures, and full/power recovery autorotations.

Performance Standards. Exhibit the ability to operate the aircraft under all emergency conditions.

Prerequisites. N/A.

Ordnance. N/A.

External Syllabus Support. N/A.

Crew. CSI (BIP)/PUI.

QUAL-610 E UH-1N A NS

Goal. Tracking Code for TERF qualification.

Requirement. Completion of the TERF-211 meets the requirements for the PUI to be TERF qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as TERF qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-610 shall be logged.

Prerequisite. See TERF-211.

QUAL-611 E UH-1N A NS

Goal. Tracking Code for NSQ (HLL).

Requirement. Successfully complete the requirements of CAL-223. Completion of CAL-223 (and prerequisites) meets the requirements for the PUI to be NSQ (HLL) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as NSQ (HLL) qualified shall be placed in the NATOPS jacket and APR, and a tracking code of RQRD-611 shall be logged.

Prerequisite. See CAL-223.

QUAL-612 E UH-1N A NS

Goal. Tracking Code for NSQ (LLL).

Requirement. Completion of all ANSQ events meets the requirements for the PUI to be NSQ (LLL). At the discretion of the squadron commanding officer a letter assigning the PUI as ANSQ (LLL) qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-612 shall be logged.

Prerequisite. See ANSQ-312.

QUAL-615 E UH-1N A

Goal. Tracking Code for day Carrier Qualification (CQ).

Requirement. Successfully completing the requirements of CQ-330 meets the requirements for the PUI to be CQ qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as CQ qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-615 shall be logged.

Prerequisite. See CQ-330.

QUAL-616 E UH-1N A NS

Goal. Tracking Code for NVD Carrier Qualification (NVDCQ).

Requirement. Successfully completing the requirements of CQ-331 meets the requirements for the PUI to be NVDCQ. At the discretion of the squadron commanding officer a letter assigning the PUI as NVDCQ shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-616 shall be logged.

Prerequisite. See CQ-331.

QUAL-617 E UH-1N A N

Goal. Tracking Code for night unaided Carrier Qualification (Night CQ).

Requirement. Successfully completing the requirements of CQ-430 meets the requirements for the PUI to be Night CQ

qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as Night CQ qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-617 shall be logged.

Prerequisite. See CQ-430.

QUAL-618 E UH-1N A

Goal. Tracking code for RWDACM.

Requirement. Completion of the RWDACM stage meets the requirements for the PUI to be RWDACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as RWDACM qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-618 shall be logged.

Prerequisite. See DACM-413.

QUAL-619 E UH-1N A

Goal. Tracking Code for DACM.

Requirement. Completion of the FWDACM stage meets the requirements for the PUI to be DACM qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as DACM qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-619 shall be logged.

Prerequisite. See DACM-416.

QUAL-624 E UH-1N A (NS)

Goal. Tracking Code for FAC(A).

Requirement. Completion of the FAC(A) stage meets the requirements for the PUI to be FAC(A) qualified. At the discretion of the squadron commanding officer a letter assigning the PUI as FAC(A) qualified shall be placed in the NATOPS jacket and APR, and a tracking code of QUAL-624 shall be logged.

Prerequisite. See FAC-343.

QUAL-625 1.5 E A (NS)

Goal. Tactical Air Coordinator (Airborne) [TAC(A)] evaluation.

Requirement. PUI will plan, brief, and execute a TAC(A) mission. Flight will include appropriate coordination with MAGTF assets, TACC, DASC, FSCC, terminal controllers, and CAS aircraft. Code may be logged in conjunction with a TAC-470 flight.

Performance Standards. Accurately copy immediate JTAR. Coordinate timely CAS in response to immediate request. Pass CAS aircraft BDA via the C^3 system.

Prerequisite. QUAL-624, DESG-679.

Ordnance. None.

External Syllabus Support. Two CAS elements and two terminal controllers.

Crew. TAC(A)I (NSI)/PUI/CC (AO).

DESG-630 E 1 UH-1N (N)(NS)

Goal. PQM Designation.

Requirement. Completion of the Combat Capable stage meets the requirements for the PUI to be PQM. At the discretion of the squadron commanding officer a letter assigning the PUI as PQM shall be placed in the NATOPS jacket and APR, and a tracking code of DESG-630 shall be logged.

Prerequisite. See CCX-181.

DESG-631 E 1 UH-1N A (NS)

Goal. Tracking Code for Utility Helicopter Commander (UHC) Designation.

Requirement. Successfully complete the requirements of the 300-level Tactics stage. PUI will fly as wingman in a tactical mission.

Prerequisite. 300-level, ANSQ, SWD, ESC and TAC stages complete. HIE-403.

DESG-632 E 1 UH-1N A

Goal. Tracking Code for Functional Check Pilot designation.

Requirement. Successfully complete the local requirements for designation by the commanding officer. This code shall be logged in conjunction with the appropriate flight that shall be flown in a PMC/FMC aircraft.

Prerequisite. None.

4. Section Leader

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead a section of H-1s.

b. General

(1) PUI shall conduct day and night workup sorties in order to develop section leadership. Mixed sections are authorized. Completion of

the Section Leader Under Training (SLUT) syllabus meets the requirements for the PUI to be designated a section leader. At the discretion of the squadron commanding officer, a letter designating the pilot as section leader shall be placed in the NATOPS jacket and APR, and a tracking code of DESG-649 shall be logged. The section leader evaluation will use ordnance. Re-designation will require successful completion of the evaluation event (649) only. For the evaluation flight the PUI will fly any of the previously flown Combat Ready or Combat Qualification sorties in conjunction with the 649 tracking code.

(2) After the commanding officer has designated the PUI in writing as a section lead and to facilitate automated tracking (SARA), the operations department is required to log DESG-649 (section lead) for the newly designated PUI. This code shall not be logged until the designation letter resides in the NATOPS and APR.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. The PUI shall demonstrate familiarity with appropriate chapters of the UH-1N TACMAN and local SOPs.

e. Flight and Simulator Event Training. (3 Sorties, 4.5 Hours).

DESG-640 2 UH-1N A

Goal. Tracking code for day section leader training.

Requirement. Plan, brief, lead and debrief a section. The PUI will fly any of the previously flown Combat Ready or Combat Qualified sorties in conjunction with the 640 tracking code.

Performance Standards. See appropriate syllabus event.

Prerequisite. DESG-631.

Ordnance. Optional.

External Syllabus Support. See appropriate syllabus event.

Crew. As listed at the end of each event.

DESG-641 2 UH-1N A NS

Goal. Tracking Code for night section leader training.

Requirement. Plan, brief, lead and debrief a section. The PUI will fly any of the previously flown Combat Ready or Combat Qualified sorties in conjunction with the 641 tracking code. Safe completion of the applicable mission as a section leader.

Prerequisites. DESG-631.

Ordnance. Optional.

External Syllabus Support. See appropriate syllabus event.

Crew. As listed at the end of each event, NSI required.

DESG-649 E 2 UH-1N A (NS)

Goal. Tracking Code for section leader evaluation.

Requirement. Plan, brief, lead and debrief a section on a day or night tactical mission utilizing ordnance. The PUI will fly any of the previously flown Combat Ready or Combat Qualified sorties in conjunction with the 649 tracking code.

Performance Standards. Safe completion of the applicable mission as a section leader.

Prerequisites. DESG-640, DESG-641.

Ordnance. See the appropriate syllabus event for specific ordnance loads.

External Syllabus Support. See appropriate syllabus event.

Crew. As listed at the end of each event. NSI required if flown at night.

5. Division Leader

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead a division of H-1s.

b. General

(1) PUI shall conduct day and night workup sorties in order to develop division leadership. Mixed divisions are authorized. Completion of the DLUT syllabus meets the requirements for the PUI to be designated a division leader. At the discretion of the squadron commanding officer, a letter designating the pilot as division leader shall be placed in the NATOPS jacket, APR and a tracking code of DESG-659 shall be logged. The division leader evaluation sortie will use ordnance. Minimum qualifications will be IAW NATOPS. Re-designation will require successful completion of the evaluation event (659) only. For the evaluation flight the PUI will fly any of the previously flown Combat Ready or Combat Qualified sorties in conjunction with the 659 tracking code.

(2) After the commanding officer has designated a pilot in writing as a division lead and to facilitate automated tracking (SARA), the operations department is required to log DESG-659 (division lead) for the newly designated pilot. This code shall not be logged until the designation letter resides in the NATOPS and APR.

c. Crew Requirements. As listed at the end of each event.

d. Ground/Academic Training. The PUI shall demonstrate familiarity with appropriate chapters of the UH-1N TACMAN and local SOPs.

e. Flight and Simulator Event Training. (3 Sorties, 4.5 Hours).

DESG-650 3+ UH-1N A

Goal. Tracking code for day division leader training.

Requirement. Plan, brief, lead and debrief a division. The PUI will fly any of the previously flown Combat Ready or

Combat Qualified sorties in conjunction with the 650 tracking code.

Performance Standards. Safe completion of the applicable mission as a division leader.

Prerequisites. DESG-649.

Ordnance. Optional.

External Syllabus Support. See appropriate syllabus event.

Crew. See appropriate syllabus event. The instructor must be a division leader and NSI.

DESG-651 3+ UH-1N A NS

Goal. Tracking Code for night division leader training.

Requirement. Plan, brief, lead and debrief a division. The PUI will fly any of the previously flown Combat Ready or Combat Qualified sorties in conjunction with the 651 tracking code.

Performance Standards. Safe completion of the applicable mission as a division leader.

Prerequisites. DESG-649.

Ordnance. Optional.

External Syllabus Support. See appropriate syllabus event.

Crew. See appropriate syllabus event. The instructor must be a division leader and NSI.

DESG-659 E 3+ UH-1N A (NS)

Goal. Tracking code for division leader evaluation.

Requirement. Plan, brief, lead and debrief a division on a day or night tactical mission using ordnance. The PUI will fly any of the previously flown Combat Ready or Combat Qualified sorties in conjunction with the 659 tracking code.

Performance Standards. Safe completion of the applicable mission as a division leader.

Prerequisites. DESG-650, DESG-651.

Ordnance. See appropriate syllabus event, but ordnance is required.

External Syllabus Support. See appropriate syllabus event.

Crew. See appropriate syllabus event. The instructor must be a division leader and NSI.

6. Flight Leader

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead a flight of at least 5 helicopters.

b. General. Flight leader is designated in recognition of experience, demonstrated flight leadership ability, and judgment. Work-up for this phase shall consist of completion of the division leader syllabus. Completion of DESG-669 meets the requirements for the PUI to be designated a flight leader. At the discretion of the squadron commanding officer, a letter designating the pilot as flight leader shall be placed in the NATOPS jacket, APR and a tracking code of DESG-669 shall be logged.

c. Crew Requirements. Work-up sorties shall be flown IAW the division leader syllabus. The DESG-669 evaluation sortie must be flown with a designated flight leader.

d. Ground/Academic Training. The PUI shall demonstrate familiarity with OAS, assault support operations, MACCS, and MAGTF integration.

e. Flight and Simulator Event Training. Command specific.

DESG-669 E 5+ H-1 A (NS)

Goal. Conduct a flight leader check.

Requirement. Plan, brief, lead and debrief a sortie on a day or night tactical mission. The PUI will fly any of the previously flown sorties in conjunction with the 669 tracking code.

Performance Standards. Safe completion of the applicable mission as a flight leader.

Prerequisites. DESG-659.

Ordnance. Optional.

External Syllabus Support. See appropriate syllabus event.

Crew. See appropriate syllabus event.

7. Air Mission Commander (AMC)

a. Purpose. To prepare and evaluate PUI's ability to plan, brief, and lead an assault support or OAS mission IAW MCCRES/MEU (SOC) standards.

b. General. AMC is designated in recognition of experience, demonstrated flight leadership ability, and judgment. Work-up for this phase shall consist of completion of the division leader syllabus. Completion of DESG-679 meets the requirements for the PUI to be designated an AMC. At the discretion of the squadron commanding officer, a letter designating the PUI as an AMC shall be placed in the NATOPS jacket and APR, and a tracking code of DESG-679 shall be logged.

c. Crew Requirements. The DESG-679 evaluation must be evaluated by an AMC. There is no requirement for the PUI to conduct aircrew duties during the evaluation.

d. Ground/Academic Training. The PUI shall demonstrate familiarity with OAS, assault support operations, MACCS, and MAGTF integration.

e. Flight and Simulator Event Training. None.

DESG-679 E (NS)

Goal. Conduct an AMC check.

Requirement. Plan, brief, and debrief a sortie as AMC.

Performance Standards. Safe completion of the applicable mission as AMC.

Prerequisite. DESG-659.

Ordnance. Optional.

External Syllabus Support. Assault support aircraft, GCE and MACCS agencies as required.

Crew. None.

IDSG-680 E UH-1N A

Goal. Tracking code for Basic Instructor Pilot (BIP) designation.

Requirement. Completion of the BIP stage meets the requirements for the IUT to be designated a BIP. At the discretion of the squadron commanding officer, a letter designating the pilot as a BIP shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-680 shall be logged.

Performance Standards. See appropriate BIP event.

Prerequisite. This code will be logged in conjunction with the last BIP-500 series that is flown.

Ordnance. None.

External Syllabus Support. See BIP-503, BIP-504, BIP-505, or BIP-506.

Crew. See appropriate syllabus event.

IDSG-681 E UH-1N A

Goal. Tracking code for Terrain Flight Instructor (TERFI) designation.

Requirement. Completion of the TERFI stage meets the requirements for the IUT to be designated a TERFI. At the discretion of the squadron commanding officer, a letter designating the pilot as a TERFI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-681 shall be logged.

Performance Standards. See appropriate TERFI sortie.

Prerequisites. This code will be logged in conjunction with the last TERF-500 sortie that is flown.

Ordnance. None.

External Syllabus Support. None.

Crew. See appropriate syllabus sortie.

IDSG-682 E UH-1N A

Goal. Tracking code for Weapons Training Officer (WTO) designation.

Requirement. Completion of the WTO stage meets the requirements for the IUT to be designated a WTO. At the discretion of the squadron commanding officer a letter designating the pilot as a WTO shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-682 shall be logged.

Performance Standards. See appropriate WTO sortie.

Prerequisite. This code will be logged in conjunction with the last WTO-500 series sortie that is flown.

Ordnance. None.

External Syllabus Support. None.

Crew. See appropriate syllabus sortie.

IDSG-683 E AH-1 A (NS)

Goal. Tracking code for FAC(A)I designation.

Requirement. Successfully complete the requirements of FAC(A)I. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as a FAC(A)I shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-683 shall be logged.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

IDSG-688 E UH-1N A

Goal. Tracking Code for DACMI designation.

Requirement. Successfully complete the requirements of DACMI. After successfully completing the appropriate MAWTS-1 Course

Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as a DACMI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-688 shall be logged.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

IDSG-689 E UH-1N A (NS)

Goal. Tracking Code for TAC(A)I designation.

Requirement. Successfully complete the requirements of TAC(A)I. This code shall be logged in conjunction with the appropriate MAWTS-1 Course Catalog syllabus event.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

IDSG-694 E UH-1N A NS

Goal. Tracking Code for NSFI designation.

Requirement. Successfully complete the requirements of NSFI. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as an NSFI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-694 shall be logged.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

IDSG-695 E UH-1N A NS

Goal. Tracking Code for NSSI designation.

Requirement. Successfully complete the requirements of NSSI. This code shall be logged in conjunction with the appropriate MAWTS-1 Course Catalog syllabus event.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

IDSG-696 E 2 H-1 A NS

Goal. Tracking Code for NSI designation.

Requirement. Successfully complete the requirements of NSI. After successfully completing the appropriate MAWTS-1 Course Catalog syllabus and at the discretion of the squadron commanding officer, a letter designating the pilot as an NSI shall be placed in the NATOPS jacket and APR, and a tracking code of IDSG-696 shall be logged.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

IDSG-699 E UH-1N A

Goal. Tracking code for WTI designation.

Requirement. Successfully complete the requirements of WTI. This code shall be logged in conjunction with the appropriate MAWTS-1 Course Catalog syllabus event.

Performance Standards. See MAWTS-1 Course Catalog.

Prerequisite. IAW MAWTS-1 Course Catalog requirements.

Ordnance. See MAWTS-1 Course Catalog.

External Syllabus Support. See MAWTS-1 Course Catalog.

Crew. See MAWTS-1 Course Catalog.

160. Ordnance Requirements

	INITIAL PILOT(1)	REFRESHER PILOT(2)	PROFICIENT PILOT(3)
2.75″ RKTS – HE/INERT	56	28	42
2.75″ RKTS – WP/RP	28	14	21
2.75″ RKTS – ILLUM	7	7	7
7.62MM – GAU-17	34,500	12,000	19,500
.50 CAL – GAU-16	6,200	2,100	3,500
7.62MM – M-240	7,200	2,800	4,400
CHAFF	340	120	240
FLARES	400	180	300
NUMBER OF SQDN PILOTS/CATEGORY(4)	7	8	8

GENERAL: IN THESE CALCULATIONS ORDNANCE WAS ALWAYS INCLUDED ON ORDNANCE OPTIONAL FLIGHTS. REQUIREMENTS ARE PER PILOT. ASSUMPTION WAS MADE THAT INITIAL/REFRESHER SYLLABUS COULD BE COMPLETED IN 1 YEAR.

1. INITIAL PILOTS SHALL FLY ALL 200 AND 300-LEVEL EVENTS.
2. REFRESHER PILOTS SHALL FLY ALL “R” CODED 200 AND 300-LEVEL EVENTS.
3. PROFICIENT PILOTS AS DEFINED BY THE CORE SKILL PROFICIENCY TABLE IN PARAGRAPH 4 ON PAGE 1-6.
4. BASED ON A FULL HMLA T/O OF 23 UH PILOTS, WITH THE ASSUMPTION THAT ROUGHLY 1/3 FALL INTO EACH CATEGORY.

ANNUAL SQUADRON REQUIREMENTS				
	INITIAL PILOT x 7	REFRESHER PILOT x 8	PROFICIENT PILOT x 8	ANNUAL SQUADRON TOTAL
2.75″ RKTS – HE/INERT	392	224	336	952
2.75″ RKTS – WP/RP	196	98	168	462
2.75″ RKTS – ILLUM	49	56	56	161
7.62MM – GAU-17	241,500	84,000	156,000	481,500
.50 CAL – GAU-16	43,400	16,800	28,000	88,200
7.62MM – M-240	50,400	22,400	35,200	108,000
CHAFF	2,380	960	1920	5,260
FLARES	2,800	1440	2400	6,640

COMBAT CAPABLE PHASE													
STAGE	FLT CODE	FLT HRS	SIM HRS	REFLY INTERVAL	CRP	C	R	M	E	N	NS	A/C OR SIM	# A/C
SFAM	100		1.5	*	0.5	X	X	X	X			S	
FAM	101	1.5		*	1.0	X			X			A	1
FAM	102	1.5		*	1.0				X			A	1
FAM	103	1.5		*	1.0	X			X			A	1
FAM	104	1.5		*	1.0	X			X			A	1
SFAM	105		1.5	*	0.75	X	X	X	X			S	
FAM	106	2.0		*	1.0	X	X	X	X			A	1
FAM	107	2.0		*	1.0	X			X			A	1
FAM	108	2.0		*	1.0				X			A	1
SFAM	111		1.5	*	0.75	X	X		X	N		S	
FAM	112	1.5		*	1.0				X	N		A	1
FAM	113	1.5		*	1.0	X	X	X	X	N		A	1
SFAM	114		1.5	*	0.75	X			X		NS	S	
FAM	115	1.5		*	1.0	X	X	X	X		NS	A	1
FAM	118	2.0		*	1.0	X	X	X	X			A	1
SINST	120		1.5	*	0.75	X			X	(N)		S	
SINST	121		1.5	*	0.75	X	X	X	X	(N)		S	
SINST	122		1.5	*	0.75	X	X		X	(N)		S	
INST	123	1.5		*	1.0				X	(N)		A	1
INST	124	2.0		*	1.0	X	X	X	X	(N)		A	1
INST	125	2.0		*	1.0	X	X	X	X	(N)		A/S	1
FORM	130	2.0		*	1.0	X			X			A	2
FORM	131	1.5		*	1.0	X			X			A	2
FORM	132	2.0		*	1.0	X			X		NS	A	2
TERF	140	1.5		*	1.0	X	X		X			A	1
TERF	142	1.5		*	1.0	X			X		NS	A	1
NAV	150	1.5		*	1.0				X			A	1
NAV	151	1.5		*	1.0				X			A	2
NAV	152	1.5		*	1.0				X		NS	A	1
SSWD	160		1.5	*	0.75	X	X	X	X			S	
SWD	161	1.5		*	1.0	X			X			A	2
CAL	170	1.5		*	1.0	X			X			A	1
CAL	171	1.5		*	1.0	X	X		X			A	1
CAL	172	1.5		*	1.0	X	X	X	X		NS	A	1
EXT	175	1.5		*	1.0	X			X			A	1
SCCX	180		1.5	*	0.75	X	X	X	X			S	
CCX	181	2.0		*	1.5	X	X	X	X			A	1
Sub Total 100		46.5	13.5		35.0								
CRP Pre 100					25.0								
100 Level Total		46.5	13.5		60.0								

Figure 1-2.--MOS 7563 Refly Interval, Combat Readiness Percentage.

COMBAT READY PHASE												
STAGE	CODE	FLT HRS	SIM HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
SFCLP	200		1.5	*	0.5	X	X		N	NS	S	
FCLP	201	1.0		365	0.5	X	X				A	1
FCLP	202	1.0		365	0.5	X	X		N	NS	A	1
TERF	210	2.0		365	0.5	X					A	2
TERF	211	2.0		365	0.5	X		X		NS	A	2
NVD	215			*	0.5	X				NS	A	1
SNVD	216		1.5	*	0.5	X				NS	S	
CAL	220	1.5		180	0.5	X	X				A	2
CAL	221	1.5		180	0.5	X				NS	A	2
CAL	222	1.5		180	0.5	X	X				A	2
CAL	223	1.5		180	1.0	X	X	X		NS	A	2
REC	230	1.5		365	0.5	X	X			NS	A	2
REC	231	1.5		180	0.5	X					A	1
SSWD	240		1.5	*	0.5	X	X				S	
SWD	241	1.5		180	1.0						A	1
SWD	242	1.5		180	1.0					NS	A	1
SWD	243	1.5		180	1.0	X	X				A	2
SWD	244	1.5		180	1.0	X	X			NS	A	2
ESC	250	1.5		365	0.5	X					A	2
ESC	251	1.5		365	0.5	X	X			NS	A	2
ESC	252	1.5		730	0.5	X	X			(NS)	A	2
TAC	260	1.5		365	1.0	X				(NS)	A	1
TAC	261	1.5		365	1.0	X				(NS)	A	2
Sub Total 200		28.5	4.5		15.0							
Total 100		46.5	13.5		60.0							
Total 100 & 200		75.0	18.0		75.0							

Figure 1-2.--MOS 7563 Refly Interval, Combat Readiness Percentage--Continued.

COMBAT QUALIFICATION PHASE												
STAGE	CODE	FLT HRS	SIM HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
SEW	300		1.5	*	1.0	X					S	
EW	301	2.0		365	1.0	X	X				A	1
SANSQ	310		1.5	365	0.5	X				NS	S	
ANSQ	311	2.0		180	2.0	X	X			NS	A	1
ANSQ	312	1.5		180	2.0	X	X			NS	A	2
ANSQ	313	1.5		180	2.0	X	X	X		NS	A	2
TAC	320	1.5		180	1.5					NS	A	1
TAC	321	1.5		180	1.5	X	X			NS	A	2
TAC	322	1.5		365	1.0	X	X			NS	A	2
TAC	323	1.5		365	1.5	X				(NS)	A	2
TAC	324	1.5		365	1.5	X	X			NS	A	2
TAC	325	1.5		365	1.0	X	X			NS	A	2
CQ	330	1.0		365	0.5	X	X				A	1
CQ	331	1.0		365	0.5	X	X			NS	A	1
FAC	340	1.5		365	0.5	X	X			NS	A	1
FAC	341	2.0		365	0.5	X	X				A	2
FAC	342	2.0		365	0.5	X	X			NS	A	2
FAC	343	2.0		365	1.0	X	X	X		(NS)	A	2
Sub Total 300		25.5	3.0		20.0							
Total 100 & 200		75.0	18.0		75.0							
Total 100, 200 & 300		100.5	21.0		95.0							

Figure 1-2.--MOS 7563 Refly Interval, Combat Readiness Percentage--Continued.

FULL COMBAT QUALIFICATION PHASE												
STAGE	CODE	FLT HRS	SIM HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
HIE	400	1.0		365	0.2	X				(NS)	A	1
HIE	401	1.0		365	0.2	X				(NS)	A	1
HIE	402	1.0		365	0.2	X	X				A	1
HIE	403	1.0		365	0.2	X					A	1
HIE	404	1.0		365	0.2	X					A	1
HIE	405	1.0		365	0.2	X					A	1
HIE	406	1.0		365	0.2	X	X			NS	A	1
DACM	410	1.5		365	0.4	X					A	2
DACM	411	1.0		365	0.4	X	X	X			A	1
DACM	412	1.0		365	0.4	X	X				A	2
DACM	413	2.0		365	0.4	X	X	X			A	2
DACM	414	1.0		365	0.3	X	X				A	1
DACM	415	1.0		365	0.3	X					A	2
DACM	416	1.0		365	0.3	X	X	X			A	2
NBC	420	1.0		365	0.2	X					A	1
CQ	430	1.0		365	0.2	X	X	X	N		A	1
MAT	450	1.0		365	0.2	X					A	1
MAT	451	1.0		365	0.2	X	X			NS	A	1
TAC	470	1.5		365	0.3	X	X			(NS)	A	1
Sub Total 400		21.0	0.0		5.0							
Total 100, 200, & 300		100.5	21.0		95.0							
Total 100, 200, 300, 400		121.5	21.0		100.0							

Figure 1-2.--MOS 7563 Refly Interval, Combat Readiness Percentage--Continued.

INSTRUCTOR TRAINING PHASE												
STAGE	CODE	FLT HRS	SIM HRS	REFLY INTERVAL	CRP VALUE	C	R	E	N	NS	A/C OR SIM	# A/C
SBIP	500		1.5	*				X			S	
BIP	501	1.5		*				X			A	1
BIP	502	1.5		*				X	(N)		A	1
BIP	503	1.5		*				X	(N)		A	1
BIP	504	1.5		*				X			A	2
BIP	505	1.0		*				X			A	1
TERFI	510	1.5		*							A	1
TERFI	511	1.5		*			X	X			A	1
WTO	520	1.5		*						(NS)	A	2
WTO	521	1.5		*			X	X		(NS)	A	2+
Sub Total 500		13.0	1.5		0.0							
Total 100, 200, 300, & 400		121.5	21.0		100.0							
Total 100, 200, 300, 400 & 500		134.5	22.5		100.0							

Figure 1-2.--MOS 7563 Refly Interval, Combat Readiness Percentage--Continued.

STAGE	CODE	FLT HRS	REFLY INT	TRACK	E	N	NS	A/C OR SIM	# A/C	NOTES
RQRD	600	1.5	365		X	(N)		A/S	1	INST CHECK
RQRD	601	1.5	365		X	(N)	(NS)	A	1	NATOPS CHECK/PQM
RQRD	602		180		X			S	1	EP SIM
QUAL	610		*	X	X			A	1	TERF QUAL
QUAL	611		*	X	X		NS	A	1	NSQ(HLL) QUAL
QUAL	612		*	X	X		NS	A	1	NSQ(LLL) QUAL
QUAL	615		*	X	X			A	1	CQ QUAL
QUAL	616		*	X	X		NS	A	1	CQ AIDED QUAL
QUAL	617		*	X	X	N		A	1	CQ UNAIDED QUAL
QUAL	618		*	X	X			A	2	RWDACM QUAL
QUAL	619		*	X	X			A	2	DACM QUAL
QUAL	624		*	X	X		(NS)	A	1	FAC(A) QUAL
QUAL	625		*	X	X		(NS)	A	1	TAC(A) QUAL
DESG	630		*	X	X		(NS)	A	1	PQM
DESG	631		*	X	X		(NS)	A	1	UHC
DESG	632		*	X	X			A	1	FCP
DESG	640		*	X	X			A	2	DAY SLUT
DESG	641		*	X	X		NS	A	2	NIGHT SLUT
DESG	649		*	X	X		(NS)	A	2	SECT LEADER
DESG	650		*	X	X			A	3+	DAY DLUT
DESG	651		*	X	X		NS	A	3+	NIGHT DLUT
DESG	659		*	X	X		(NS)	A	3+	DIV LEADER
DESG	669		*	X	X		(NS)	A	5+	FLIGHT LEADER
DESG	679		*	X	X		(NS)	A	1	AMC/ASC(A)
IDSG	680		*	X	X			A	1	BIP
IDSG	681		*	X	X			A	1	TERFI
IDSG	682		*	X	X		(NS)	A	2	WTO
IDSG	683		*	X	X		(NS)	A	1	FAC(A)I
IDSG	688		*	X	X			A	2	DACM(I)
IDSG	689		*	X	X		(NS)	A	1	TAC(A)I
IDSG	694		*	X	X		NS	A	1	NSFI
IDSG	695		*	X	X		NS	A	1	NSSI
IDSG	696		*	X	X		NS	A	1	NSI
IDSG	699		*	X	X		(NS)	A	1	WTI
		FLT HRS		CRP						
Sub Total		3.0		0.0						

Figure 1-2.--MOS 7563 Refly Interval, Combat Readiness Percentage--Continued.

UH-1N FLIGHT UPDATE CHAINING

The below chaining codes chain only the day portion of night optional flights. The IP shall log the appropriate additional code(s) if flown at night. Additionally the IP shall ensure the appropriate codes are logged if mission execution results in flying multiple codes that are not annotated on the flight schedule.

STAGE	FLIGHT	FLIGHTS UPDATED
SFCLP	200	
FCLP	201	200
FCLP	202	200, 201
TERF	210	
	211	210
NVD	215	
SNVD	216	215
CAL	220	
	221	220
	222	210, 220
	223	210, 211, 216, 220, 221, 222
REC	230	210
	231	210, 211, 216, 230
SSWD	240	
SWD	241	210, 230, 240
	242	210, 211, 216, 230, 231, 240, 241
	243	210, 230, 240
	244	210, 211, 216, 230, 231, 242, 243
ESC	250	210, 230
	251	210, 211, 216, 230, 231, 250
	252	210, 230
TAC	260	
	261	210, 220, 230, 243
SEW	300	
EW	310	210, 230, 300
SANSQ	310	
ANSQ	311	210, 211, 216, 230, 231, 310
	312	210, 211, 216, 230, 231, 310, 311
	313	210, 211, 216, 223, 230, 231, 310, 311
TAC	320	211, 216, 231, 244
	321	211, 216, 231, 244
	322	211, 216, 231, 244, 251
	323	211, 216, 231, 244, 313
	324	211, 216, 231, 244, 313
	325	211, 216, 231, 244, 313

Figure 1-3.--MOS 7563 Flight Update Chaining.

CQ	330	200, 201
	331	200, 201, 202, 330
FAC	340	210, 230
	341	210, 230
	342	210, 211, 230, 231
	343	210, 230
HIE	400	
	401	
	402	220
	403	210, 220
	404	210, 220
	405	
	406	210, 211, 221
DACM	410	241
	411	410
	412	410, 411
	413	410, 411, 412
	414	410, 411, 412, 413,
	415	410, 411, 412, 413, 414
	416	410, 411, 412, 413, 414, 415
NBC	420	
CQ	430	200, 201, 202, 330
MAT	450	210
	451	210, 211
TAC	470	

Figure 1-3.--MOS 7563 Flight Update Chaining--Continued.